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AFTER THE THAW: NATIONAL SECURITY OBJECTIVES IN THE POST-COLD WAR ERA

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BEFORE THE

COMMITTEE ON THE BUDGET
UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

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TUESDAY, DECEMBER 12, 1989

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Washington, DC.

The committee met, pursuant to notice, at 10:07 a.m., in room SD-608, Dirksen Senate Office Building, Hon. Jim Sasser (chairman of the committee) presiding.

Present: Senators Sasser, Riegle, Domenici, and Grassley.

Staff present: John Hilley, staff director; John Callahan, deputy staff director; Randall DeValk, senior defense analyst.

For the minority: G. William Hoagland, staff director; Carol Hartwell, assistant director; and Richard Doyle, senior defense analyst.

OPENING STATEMENT OF CHAIRMAN SASSER

Chairman SASSER. The committee will come to order.

I want to extend a warm welcome to our distinguished witnesses this morning. We learned just before getting underway that Mr. Richard Perle would not be able to appear this morning. Apparently he is incapacitated with a case of the flu, and that's understandable in this kind of weather. We'll look forward to having Mr. Perle at a later date.

This hearing this morning, in my judgment, is absolutely demanded by the volcanic international events of recent months.

Nearly 30 years ago, a new President, John Fitzgerald Kennedy, talked about what he referred to as "a long twilight struggle"—a long twilight struggle against the forces of despotism in the Soviet Union and Eastern Europe. Well, today, with resolution of that struggle in sight, we may well be beginning a long daylight war—a war in which the security of nations will be defined in terms of gross national product rather than in the throw-weight of missiles, and victory will be determined by standards of living rather than by levels of survivability.

I think it's now clear that the year 1989 will have for future generations the same historic resonance that the year 1945, the end of the Second World War, the year 1917, the beginning of the Bolshevik Revolution, and 1848, the year that marked the revolutions that swept Europe. The year 1989 I think may have the same significance as those years have had in times past.

In fact, 1989 may really take on the significance of 1789 when an entire world order collapsed. That comparison, in my view, goes

beyond superficial similarities. It goes beneath the surface of massive world change and gets directly at the root economic circumstances that have caused these changes.

On the eve of the French Revolution in 1789, the French revolutionary Mirabeau observed, and I quote, that "the nation's deficit is the nation's treasure."

Now, that, of course, is true only from the perspective of a revolutionary—one who saw the best opportunity to achieve radical change in a kind of fiscal crisis, the kind of fiscal crisis that brings about social and political instability.

In my judgment, that observation from revolutionary France represents a profound comment on the circumstances of Poland, of Hungary, of East Germany, and certainly of the Soviet Union.

In those cases, the nations' deficit has, indeed, been the democratic revolution's treasure. The economic stagnation and economic discontent has sown the seeds of popular movements, and the overwhelming failure of centralized government economic planning to meet the fundamental needs of the governed has burdened Communist despotism to the point of collapse in the countries of Eastern Europe.

Perhaps the major achievement of Mikhail Gorbachev may be that he alone among the socialist leaders has sought to avert that inevitable economic collapse by embracing the primacy of domestic economics—by acknowledging the root cause of domestic discontent and attempting to take it by the throat and do something about it.

That occurred in this country in 1932 when a President by the name of Franklin Roosevelt also realized that the economic discontent was sowing the seeds of revolution, and he took it by the throat and saved capitalism and saved free institutions. And perhaps Gorbachev is acting similarly to save socialism.

That is the fundamental calculus behind Gorbachev's decision to pursue a relaxation of world tensions, the kind of relaxation that would enable him to begin cutting back on a Soviet defense establishment, an establishment that consumes 16 percent of the economy's total output at the very minimum.

The Soviet president understands that his government simply cannot survive if defense continues to drain his economy of its productive resources.

That same calculus may begin to govern the day on both sides of the crumbling Iron Curtain.

Our own problems with fiscal priorities are certainly nothing like Gorbachev's. Defense consumes a much smaller percentage of the U.S. gross national product, and, of course, we face no crisis of potential starvation of our people, of radical disruption if we don't reallocate our resources, as Gorbachev faces.

We don't stand, in this country, in need of radical social change or radical economic change, although some would argue that change in both categories is necessary. And that's precisely why our national deficit is anything but a national treasure. Our national deficit is our national albatross.

In the last 5 years, we have sustained the largest, costliest, longest peacetime arms buildup in the history of this Nation. Although we've slowed that buildup in the last 2 years, we're still spending

about $70 billion more in constant terms than we spent for defense during the Nixon-Ford post-Vietnam peacetime period.

Those massive expenditures have limited our range of policy choices; they've restricted our ability to deal with the domestic problems facing this country; they've diverted us from the enterprise of building a sounder, more productive domestic economy.

In my judgment, this unique moment in world history demands that we change all that.

The hearing this morning is designed to explore America's fiscal crisis in the context of a global "perestroika"—an international restructuring that may well subordinate guns to butter truly and completely for the first time since the Second World War.

This new order that we're facing confronts us, I think, with some inescapable questions. They are:

To what degree can we reduce our expenditures for defense and at the same time still maintain the kind of force structure and deterrent capability that will ensure our national security?

How quickly can we and should we move to achieve these defense economies?

Does the defense budget that's apparently been planned by the administration for fiscal 1991—a budget that provides for almost—well, slightly over $300 billion in outlays when you include funding for the Department of Energy—a budget that provides that much money, does that budget represent an adequate response to the changing threat and diminished threat to American security?

The question we might ask ourselves is this: Are the planners inside the Pentagon truly engaged in a fundamental reassessment of our defense spending priorities based on a genuine reassessment of our defense needs? Or are they simply engaged in a marginal effort to save a little bit here, to save a little bit there, while they protect programs and priorities that no longer make sense?

And what is the likely future of such massively expensive weapons systems, like the new B–2 bomber, the advanced tactical fighter, the advanced tactical aircraft? What is the likely future of those weapons systems whose strategic use may now certainly be called into question?

Finally, is there any real hope for a much talked of "peace dividend," one that could offset our deficit and go toward investment in our neglected domestic priorities?

We will be investigating those and related questions throughout the budget debate of 1991, and probably for the years beyond. To answer those questions, we are pleased to have with us two very distinguished witnesses this morning. Our first witness is a distinguished American who served as Defense Secretary in both peace and war, a man who has implemented defense budgets through much of the 1960's, and a scholar who, in my judgment, is one of the country's most acute analysts of our defense establishment.

I want to welcome you, Mr. Secretary McNamara, and thank you on behalf of this committee for giving us the benefit of your very considerable experience and wisdom this morning.

Before turning to your testimony, I would like to turn to the distinguished ranking member of this committee and see if he has an opening statement, which I'm sure he will have, and get his observations this morning.

OPENING STATEMENT OF SENATOR DOMENICI

Senator DOMENICI. Thank you, Mr. Chairman.

Mr. Secretary, I'm looking forward to your testimony. If you would permit me, since this is one of the first congressional hearings—I'm sure first of many—immediately following the historic events that have occurred, including the Berlin Wall falling down, I think it's important that each of us at least give a few of our perspectives. I'll try to do that briefly.

Mr. Chairman, I appreciated your opening remarks and your recounting of history. These are momentous days, and looking at history is certainly a prerequisite to knowing where we're going. I thought you might also mention that in 1979, here in this committee, believe it or not, for those who wonder whether budget committees do anything, a year before Ronald Reagan took office, we decided that the defense of the free world as provided by the United States, our portion of it, was underfunded. And in this committee, we decided to dramatically increase defense spending. Then, President Reagan came in and, in many instances, wanted even more than we had recommended.

But I don't think it would be fair not to give this committee credit for pushing the Soviet Union—although I firmly believe that this is a victory of ideas and of ideals and of economics, in fact, of capitalism—toward change. I also think America's military preparedness and our determination, since we first decided on the policy of containment, has to be added to the equation which has brought this victory for humankind.

The events now unfolding in Europe and in the Soviet Union in many ways relate as much, if not more, to economics and the pocketbook as to defense, as much to forms of government and freedom and ideals as defense.

Nonetheless, instability, the built-in potential for it, is abundant. I'm reminded of a statement, Mr. Chairman. I was with the Foreign Minister of Mexico the other day, and he was asked about democracy on the march in the world, and he made a simple but profound statement. He said, "Anarchy takes 24 hours, but democratic governance takes a long time." And I think one could add that to build an economic system that will produce substantial goods and wealth—bread, if you would—for the people of the countries in change, also takes a while.

Having said that, there's a great deal of praise around for President Gorbachev, and obviously he deserves it. But I believe, Mr. Secretary, that he really had few choices and little time. And I believe we have many choices, and we have more time. That is not to say that we have forever, but clearly he had much less time than we and our free industrial partners have. Mr. Gorbachev had few choices, I believe we have more.

The real challenges and the real issues for the future are economic ones and governance. Stability is most important under some kind of new governance system in this world. Our role in relation to the Soviet Union, our role in relation to Western Europe, and our role as the champion of freedom in both politics and economics certainly is undergoing dramatic change. It's imperative

that we figure out where we are and what we are supposed to be doing.

Incidentally, as an aside, Mr. Chairman, you wondered if the Joint Chiefs of Staff, in their submission to the President, whether they've adjusted to a new and changing world. My guess is they have not, but I'm certainly not critical of that yet. I think the Defense Secretary would know that in 3 or 4 months. With change occurring so rapidly, no one has produced a new vision of America's role in this world. At some point they well respond to the President of the United States and to us in developing a defense budget and a defense posture commensurate with what is perceived to be America's role as a world leader in this changing world.

Until greater certainty is arrived at, until the current turmoil in the Communist world plays out, we have no way of projecting the great defense "savings" or the "peace dividend," especially for the immediate future. It's essential that we conclude some binding arms treaties, and I think the Secretary alludes to that, to back up any conclusions in reductions of defense spending.

With respect to the possible conclusion of a strategic arms treaty and the potential defense savings that would result from such an event, I would like to take this opportunity to remind people, once again, that the strategic nuclear capability of the United States amounts to 11 percent of the defense budget. The entire nuclear strategic weapons buildup, maintenance, and R&D is about 11 percent of this national budget.

We all assume to some degree that defense spending will decline. It has already declined in real terms every year since 1986; this is my second fundamental point. Will the peace dividend magically fix America's problem? I wonder about that. Will it solve the problems related the skyrocketing cost of health care which approached 12 percent of our gross national product? I don't think so. Will it make our children study harder in school and become more competent as compared to those in other countries? I don't think so. Will it make America more productive overall? It might. Will it solve our drug problem? I don't think so.

While we are optimistic, we also must remain realistic. We cannot expect quick reductions in the United States defense budget. They just won't happen. But we can't expect total restructuring of the defense budget until we understand and think through where we belong in this changing world.

I read the Secretary's testimony today as his first shot at that. I'm sure he is not here proclaiming that he is absolutely right, that this so-called 3 percent defense budget is absolutely right and we ought to start on it next month. I notice the witness, the former Secretary, is smiling. Well, I think that's right.

You know, after all, the Soviet Union, Mr. Secretary has 1,400 ICBM's still around. In fact, I have been heard to say we probably wouldn't have gone to Malta but for them, and I wonder about that. Sometimes I think that might be the case.

So we need to recognize that fact, and we must act in our national interest. Clearly, for those who think there's an instant pot of gold at the end of the defense rainbow, I think they're going to be disappointed, at least in the short term. I'm not at all positive about the long term. But if peace continues to flower and new

forms of pluralism and democratic governance stabilize throughout this world, obviously we're going to be part of it, and we're going to continue to be willing to pay the price to see that that continues, because we've done well at it on behalf of most people in the world.

I thank you very much, Mr. Chairman, for giving me a chance to give my views, and, Mr. Secretary, I look forward to hearing your remarks. I have read them, but we look forward to hearing them today.

Thank you, Mr. Chairman.

Chairman SASSER. Thank you, Senator Domenici.

Just let me say we're pleased to have Bob McNamara before this committee today. He's had a long and illustrious career in both the private and public sector. He's a graduate of both the University of California and Harvard University. He served with distinction in the U.S. Army from 1943 until 1946. He held a number of high level positions with the Ford Motor Co. He was president of the company in 1960 and conceived an automobile called the Ford Falcon—which I dutifully purchased, I might say, Mr. Secretary, and it served me very well for many, many years.

He became the Secretary of Defense in 1961 when asked to do so by President Kennedy. He served as Secretary of Defense under both Kennedy and President Johnson. After leaving that position, he became president of the World Bank until 1981. He has received the U.S. Medal of Freedom in 1968, the Albert Einstein Peace Prize in 1983, as well as numerous other significant recognitions.

His most recent books are "Blundering Into Disaster: Surviving the First Century of the Nuclear Age," and the latest one, which I am in the process of reading now is "Out of the Cold: New Thinking for American Foreign and Defense Policy in the 21st Century."

Mr. Secretary, we welcome you this morning, and we look forward to hearing your testimony.

STATEMENT OF ROBERT S. McNAMARA, SECRETARY OF DEFENSE, 1961-68; PRESIDENT OF THE WORLD BANK, 1968-81

Mr. MCNAMARA. Thank you very much, Mr. Chairman. With your permission, I would like to present a statement—it may take 15 minutes or so—as a foundation for the questions that you will wish to direct to me, which I'll endeavor to answer.

I'm very happy to appear before you and to have this opportunity to respond to your request for my views on the impact of recent changes in the Soviet Union on United States military requirements and the United States defense budget.

Contrary to what President Gorbachev said as he left Malta, the cold war is not over. I don't believe that either the Soviet Union or the United States has yet put forward a vision of a post-cold war world, the vision that Senator Domenici referred to. For the cold was to end there must be a political framework, a vision of a political framework, which would lead to high confidence that we can avoid military confrontation between the superpowers in years ahead. That does not yet exist.

However, I do believe that President Gorbachev is presenting us with the greatest opportunity in 40 years to shift the basis for the formulation of U.S. foreign and defense policy from cold war think-

ing to a totally new vision of superpower relations. By such a shift, I believe that we should be able to enhance global stability, strengthen our own security, and at the same time produce significant long-term budgetary savings and the resources to support a very much needed restructuring of our economy.

Presented with that opportunity, it's time to begin to rethink our military requirements to assure a clear articulation between foreign policy, security commitments, threat assessments, military strategy, force structures, and defense budgets.

We've hardly begun to do that. That's not unexpected. Gorbachev has only been on the scene a little over 4 years, and he's presented these dramatic possibilities only in recent months. So we've hardly begun to take the steps and lay the foundation for this new vision of our foreign policy and defense program. I think that's understandable.

But we should recognize, as each of you have pointed out, that the defense program calls for the expenditure of approximately $300 billion in the current fiscal year, fiscal year 1990. In constant dollars, that's 35 percent more than a decade ago, and, moreover, it's only 6 percent less than at the height of the Vietnam war, and it's only 10 percent below the peak of the Korean war expenditures. [See table 1.] Comparable levels of defense expenditures for future years—that is to say, fiscal year 1991 and the years immediately thereafter—are planned as well. I see no justification in present circumstances for continuing outlays at those levels.

TABLE 1.—*National defense outlays, fiscal years 1930–90* [1]

Year:	*Outlays*
1930	11.4
1931	11.4
1932	11.8
1933	10.2
1934	7.5
1935	10.2
1936	12.4
1937	12.4
1938	13.5
1939	14.0
1940	22.2
1941	73.4
1942	248.3
1943	594.7
1944	725.7
1945	803.9
1946	415.7
1947	113.6
1948	77.8
1949	107.4
1950	105.9
1951	166.7
1952	299.6
1953	330.8
1954	314.9
1955	268.7
1956	254.6
1957	258.6
1958	252.8
1959	254.0
1960	248.0
1961	248.8

Year:	Outlays
1962	261.5
1963	265.3
1964	261.7
1965	236.7
1966	255.2
1967	296.5
1968	323.7
1969	314.5
1970	289.8
1971	262.7
1972	243.6
1973	221.1
1974	211.2
1975	209.9
1976	203.3
1977	206.4
1978	207.3
1979	215.0
1980	221.0
1981	231.6
1982	250.7
1983	271.8
1984	284.9
1985	306.6
1986	308.6
1987	319.3
1988	314.4
1989	310.2
1990	300.0

[1] Includes defense expenditures of the Department of Energy.

Sources: From an unpublished paper by William W. Kaufman of the Brookings Institution. He drew on U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, pts. 1 and 2 (Government Printing Office, 1975), pp. 230, 1115–16; *Historical Tables, Budget of the United States Government, Fiscal Year 1986*, pp. 6.1(1)–6.1(8); *Department of Defense Report, Fiscal Year 1986*, p. 78, *Ibid., Fiscal Year 1988*, p. 86; *Ibid., Fiscal Year 1990*, p. 83.

Now, I want to make sure there's no misunderstanding about my views. Therefore, I'd like to make two general comments with respect to security. First, I believe it's the primary responsibility of our President, any president, it's the first duty of our government, to defend this Nation. And I believe we can afford whatever we need to spend to provide the military force necessary to achieve that objective. And I say that without any qualification whatsoever. I totally disagree with the implication of the title of Paul Kennedy's recent book, "The Rise and Decline of Great Powers," the implication being we are a great power in which our security commitments are out of balance with our economic capability. I don't believe that. We can afford what we need.

But, secondly, I also believe that our security depends on more than military force. It's a function as well of economic strength and social cohesion. Today our position in the world is adversely affected by economic weakness and by unresolved and, I think, mounting social problems.

As a nation, we have been on an enormous consumption binge. We've been living beyond our means. We've been consuming more than we produce, and we've been selling our assets and borrowing both domestically and abroad to finance the unprecedented expansion of domestic spending. The consequent rate of increase in our foreign and domestic debt is simply unsustainable.

While enjoying this consumption binge, we've permitted severe social problems to develop, problems which will plague our society

for years to come. We're facing many of the problems that the distinguished minority member pointed to: destructive rates of illiteracy; unacceptably high levels of unemployment among blacks and teenagers; a rapidly growing under class—in the capital of the richest nation in the world, Washington, DC, 51 percent of all births are illegitimate; high and rising rates of drug abuse and drug-related crimes; a failure to adequately address the problems of the poor and disadvantaged; severe distortions in sectoral and regional growth patterns; and a significant deterioration of our physical infrastructure.

I make these statements not in a partisan way. This is a function of our society, not a function of either party.

I think that one of the great achievements of the American political and social system has been its ability to support political cohesiveness in a society which is as ethnically diverse as ours. This stability depends on preserving a reasonable degree of economic equity among the various social groups. Recent developments affecting minorities and economically disadvantaged jeopardize the preservation of that unity.

So, in the face of these economic and social problems, I believe it would be folly to spend more than we need for defense. I believe we're doing so.

As I've said, I think Gorbachev has presented us an opportunity to reduce the risk of military confrontation between East and West and thereby to lower the cost of maintaining our security. The point that he returns to more than any other when he's discussing foreign policy is his belief that modern military technologies—and here he's referring to technologies affecting both nuclear and conventional forces—modern military technologies have rendered war between the superpowers an unacceptable means of achieving political ends. This is one of the major factors leading to his proposals for basic changes in East-West political and military relations.

Before we can respond to Gorbachev and before we can properly reshape our military programs, we need a vision of a world which wouldn't be dominated by the confrontation between East and West. I want to stress that, in my opinion, it would not be a world without conflict—conflict between disparate groups within nations, as we're seeing in many parts of the world today, and conflict extending across national borders. Racial and ethnic differences would remain. Political revolutions will erupt as societies advance. Historical disputes over political boundaries will continue. And economic differentials among nations, as great as they are today, will increase as the technological revolution of the 21st century sweeps unevenly across the globe.

So in these respects, the world of the future won't be different from the world of the past. Conflicts within nations, conflicts between nations won't disappear. But how different that world would be if the two superpowers could agree on two points.

First, neither would seek to take advantage of such disputes to increase or extend their political or military power beyond their borders. Consistent with that principle, neither the United States nor the Soviet Union would intervene unilaterally in regional conflicts. Secondly, their bilateral relations would be conducted according to rules of conduct which preclude the use of force.

In accordance with that approach, both the United States and the Soviet Union would initiate sharp reductions in and would ultimately terminate military support of conflicts between Third World nations and conflicts between opposition parties within those nations. Agreement by East and West to support such a program would not only represent adjustment to the reality of economic and political change in the Third World, but it would be consistent with moves to dampen down and ultimately terminate the cold war.

In a very real sense, it would be a return to Roosevelt's and Churchill's conception of the postwar world—a conception which you'll recall they put forward in the form of the Atlantic Charter in 1941. Later, they expanded it to include a proposal for establishment of the United Nations. Both their Atlantic Charter proposal and their proposal for the United Nations were put forward before the beginning of the cold war and, hence, were uncontaminated by the ideology of the cold war.

Roosevelt and Churchill believed that relations among nations should be based on the rule of law. To maintain peace, they proposed a system of collective security. That system of collective security was to be supported by the conflict resolution services and by the peacekeeping forces of an international organization.

If we proceed in that direction, while steps are being taken to implement the new political substructure, the arms control negotiations now under way in Geneva and Vienna should be expanded in scope and accelerated in time. Presidents Gorbachev and Bush at the Malta Summit took the first steps in that direction, but I think much more remains to be done. We should set both short-term and long-term agendas for arms reduction negotiations. The short-term agenda, which I think could be completed by the mid-1990's, should stress the obvious: the early finalization of what I call START I, and CFE I—the conventional force treaty now in negotiation in Vienna, and the START treaty now in negotiation in Geneva.

START I and CFE I should be followed very quickly by what I call START II and CFE II. We should begin now to set goals for those follow-on treaties. I think START II could very well lead to a further reduction of 50 percent in strategic nuclear forces. START I would call for a nominal reduction of 50 percent from, say, 12,000 accountable weapons to 6,000; START II could well cut the 6,000 in half to 3,000. In START II particular emphasis should be placed on restructuring the strategic nuclear forces to eliminate fears of vulnerability of the retaliatory force. The CFE II could reduce NATO and Warsaw Pact conventional forces to substantially lower levels than those called for by CFE I.

My understanding of CFE I is that it calls for balancing Warsaw Pact and NATO forces at levels about 10 to 15 percent below NATO's current conventional force levels. I would favor levels for CFE II as low as have been proposed by the former SACUER General Goodpaster who recommended cuts in conventional forces to 50 percent of NATO's current strength.

In association with such conventional force adjustments, there should be large reductions in tactical nuclear forces and the beginning of what can ultimately be very substantial cuts in naval forces. As the pace of political change in Europe accelerates and as

the possibility of German reunification increases, as it has with every passing day, it's important to move even more quickly than appeared desirable a few weeks ago to reduce the apparent military threat in Europe—whether viewed from the point of view of the East or the West.

The short-term arms control program will, I believe, both reduce forces and greatly improve crisis stability. However, after it's completed, the United States and the Soviet Union and their allies in the Warsaw Pact and NATO will retain very large military forces, including thousands of nuclear warheads. So a long-term program, which could be realized perhaps by the year 2000, should be developed. That would seek further reductions beyond START II and CFE II in both conventional and nuclear forces.

I think, for example, that tactical nuclear weapons could be eliminated completely, and I believe that strategic nuclear forces might be reduced to levels approach 500 to 1,000 warheads on each side.

Now, if we were to proceed on that course, I think the U.S. defense budget could be reduced substantially in both the short term and the long term. In the long term–say within 6 to 8 years—it might well be possible to cut military expenditures in half in relation to GNP. That is to say, from a level of about 6 percent as it was in 1988, to something on the order of 3 percent or below. That would make available, in 1989 dollars and 1989 GNP, something on the order of $150 billion per year which could be divided between increased consumption and the alleviation of our pressing economic and social problems.

It may be thought that a U.S. defense budget of 3 percent of GNP is a fantasy, but I think we should remember that today Japan's defense expenditures are a nominal 1 percent of GNP; Canada's are less than 3 percent of GNP; and the average defense expenditure by all NATO nations, excluding the United States, is about 3 percent of GNP.

In the short run, we can follow either one of two courses in shaping the defense budget. We can continue to muddle along as we are at present. We can allow the level of defense expenditures and the military force structure to be determined not by military requirements but by the pressure of strong lobbies representing specific geographic regions, particular defense contractors, and the individual military services. Or we can develop the long-term military force objectives in accordance with the process I have suggested; that is to say, start with a definition of a foreign policy appropriate to the new world that may lie ahead of us—and I underline the word "may" because we must protect ourselves in the event the Soviets change their approach. But we should start with our vision of a new foreign policy. We should translate that into security commitments, a revision of the threat, a development of a new military strategy and translate that into the required force structure and the defense budget required to carry out that strategy. That would, I think, introduce major changes in weapons procurement programs and other defense expenditures.

Now, the pace of change—that is to say, the reductions in the size of the defense budget to be made in each of the years immediately ahead as we move down the path toward that new long-term

objective—the pace of change would be conditioned by three factors, and I want to place particular emphasis on these because I understand your concern that we not tear apart the foundation of our security without cause. I think that's well justified.

But if we take account of these three factors and we modify our defense program in relation to them, I think we can achieve substantial reductions in the fiscal years immediately ahead. The three conditions are these:

First, the logic of the present force structure in relation to the present threat. Our force structure in recent years has grown haphazardly. It should be rationalized.

For example, five Presidents and their Secretaries of Defense—five Presidents both Republican and Democratic and their Secretaries of Defense both Republican and Democratic—accepted a 12-carrier group navy. We should revert to that by accepting the proposed elimination of carrier group 15 and by cutting carrier groups 13 and 14 as well. In addition, for example, we could remove from the force structure the B-2 bombers not yet produced.

We could remove as well the rail-mobile MX, and we could limit both the Midgetman and the SDI programs to research. We could eliminate the F-14 and the Osprey weapons systems, as has been recommended by Secretary Cheney, and we could give the Secretary the authority to close both domestic and foreign bases for which there is no military requirement. So that's the first condition, rationalizing the force structure in relation to the present threat assessment.

The second condition that would affect the pace at which we could achieve defense reductions would be unilateral adjustments in military forces by the Soviets. They are moving unilaterally to reduce military forces and budgets, and these moves will justify corresponding adjustments by the United States For example, if they proceed as they say they will "warning time" of attack will increase substantially, probably from 14 days to as much as 90 days. This will reduce the danger of surprise attack and permit adjustments in U.S. ground forces and in U.S. airlift requirements.

The Soviets have also stated publicly that their military expenditures will be cut, cut unilaterally. They state they'll be cut 14.2 percent by 1991. They appear to be well on the way to doing so. And their Prime Minister has said they will make further cuts, totalling one-third to one-half, by 1994. This should permit the United States to slow its force modernization program which today is proceeding at an extraordinarily rapid pace. The accelerated modernization program may well have been justified when it was introduced, but it does not appear to be justified in the light of these unilateral reductions that are in process by the Soviet Union.

Finally, of course, our defense budget should be shaped by the progress in arms negotiations.

If the START I and CFE I treaties are completed in 1990, as Presidents Gorbachev and Bush have agreed they should be, this will permit large adjustments in both force structure and weapons procurement programs. We should anticipate these. We should build them now into our fiscal year 1992, 1993, and 1994 budgets. I recognize the treaties may not be approved. If they're not, the actions can be reversed with little or no adverse effect on military

security. As I have suggested, I believe that START I and CFE I should be followed by START II and CFE II. It is not too early to consider the potential effects of such reductions on the fiscal year 1993 and 1994 budgets.

There are long, long lead times in our weapons procurement programs, and they're based on certain assumptions. Those assumptions will no longer be valid if we have CFE I, CFE II, START I and START II. We should begin now to take account of the possibility that the assumptions for existing weapons procurement programs, with their lead times of 5 to 7 years, need to be changed. This would surely affect the budgets of fiscal years 1992, 1993 and 1994.

In sum, I believe we should be able to reduce the Defense Department's fiscal year 1992-94 budgets by approximately $138 billion—all the figures I refer to will be in constant 1990 dollars so as to avoid the effects of inflation—below the levels presented to the Congress earlier this year. On that basis, the fiscal year 1994 budget would be approximately $265 billion instead of the $321 billion as presently planned. [See table 2.]

TABLE 2.—PROPOSED REDUCTIONS IN NATIONAL DEFENSE OUTLAYS, FISCAL YEARS 1990 TO 1994 [1]

[In billions of dollars]

Outlays	1990	1991	1992	1993	1994	1990–94 total
Inherited 5-yr Defense Program [FYDP]	309.5	313.4	329.9	347.3	365.6	[2] 1,665.7
Cheney FYDP	300.0	305.5	307.7	313.8	321.0	[3] 1,548.0
Proposed FYDP	300.0	290.0	280.0	275.0	265.0	[4] 1,410.0
Reduction proposed by RMcN		15.0	28.0	39.0	56.0	138.0

[1] Includes defense expenditures of Department of Energy.
[2] These outlays reflect the cost of continuing at its planned pace the program inherited by Secretary of Defense Richard Cheney.
[3] The FYDP submitted to Congress by Secretary Cheney earlier this year.
[4] Reflects the changes proposed by Robert S. McNamara.

Source for figures in [2] and [3]: An unpublished paper by William W. Kaufman. He drew on Department of Defense Annual Report, Fiscal 1988, pp. 98, 332; Ibid, Fiscal 1990, pp. 89, 219, 226; Budget of the United States Government, Fiscal 1990, p. 5–15.

A major criticism can be directed at the program I've outlined. It may be said that the program's acceptability is dependent on Gorbachev's success. That's far from assured. We read this morning that, in a recent meeting he even threatened to resign. There's no question he faces serious problems, and I think it's probably correct to say that the majority of United States-Soviet experts believe Gorbachev will fail.

However, while noting the difficulties that Gorbachev faces, we should recognize—as I think each of you did in your opening comments—that he has diagnosed properly the basic problems faced by his society. They are a society in crisis, an economic crisis which has led to a political crisis. And there is no alternative, in my opinion, to his political and economic reforms, if the Soviet Union is to avoid long-term economic crises and resultant political disorders. If Gorbachev's efforts fail—and they may—his successor will face the same problems. To solve them, he will be required ultimately to introduce the same solutions. There may be steps forward and steps back. He may conjure up foreign devils and seek to divert domestic attention to a foreign threat. But for the next decade or two, it is

likely the Soviet Union will move in the broad direction laid down by Gorbachev.

But suppose I'm wrong. While proceeding down the path I have outlined, can we protect ourselves against a collapse of perestroika, against a resumption of political conflict and military confrontation. I think that's a perfectly appropriate question, and I believe the answer to it is clearly yes. We can protect ourselves while moving down the path that I've suggested.

As nuclear agreements, START I, START II, bring reductions in nuclear forces and add to crisis stability—and they will do both—there need never be a weakening of our nuclear deterrent. Concurrently with the changes in nuclear forces, it appears likely through both the Soviet unilateral actions and through the bilateral agreements, such as CFE I, that the present numerical superiority and the offensive capability of the Warsaw Pact conventional forces will be reduced. In addition, there is a high probability that we can agree on additional confidence-building measures which will greatly reduce the danger to each side of surprise attack.

Together, these actions should give the West high confidence that we can, indeed, move down a path to terminate the cold war, and that we can do so with consequent reductions in defense budgets without incurring unacceptable risks in the event we fail to achieve that objective.

With such a change in East-West relations, the long-term outlook for the United States will be brighter than at any time in the past half century. I think many of our people think otherwise. That accounts for the fact that "The Rise and Fall of Great Powers" was on the best-seller list for 43 weeks. We are a Nation which has, to some degree, lost confidence in our future. We shouldn't forget, however, that we are in the forefront of the technological revolution. We do have the largest common market in the world. It's much stronger than Europe will achieve in 1992. It's a union of 50 States; in effect, a union of 50 nations. We do possess a flexible, skilled, highly mobile labor force. True, it's one which requires large investments in continuing education and training, but it is a very strong, skilled, flexible labor force. We have strong capital markets, adventuresome entrepreneurs, and stable political institutions. With these strengths, the United States is uniquely situated to move into the 21st century as the strongest of nations in a multipolar world in which there will be a far lower risk of war between the great power blocs.

I think it is true, as Paul Kennedy says, that in the 21st century the relative power of the United States will be less, but no nation will have greater power. And in absolute terms, we can be far stronger than today: stronger economically, politically, psychologically, and militarily. Substantial reductions in the Department of Defense budgets now lying before the Congress are, in my opinion, totally consistent with that objective.

Thank you very much, Mr. Chairman. I'll be very happy to try to answer any questions you may have.

Chairman SASSER. Well, thank you very much, Mr. Secretary, for your statement.

We're pleased to be joined this morning by our colleague, Senator Riegle, and I'll turn now to Senator Riegle for any statement he may wish to make before turning to questions.

OPENING STATEMENT OF SENATOR RIEGLE

Senator RIEGLE. Thank you very much, Chairman Sasser.

Let me just say how much I appreciate your leadership in pressing ahead on the questions of where we go from here with these stunning changes in what we hope are the end of cold war relationships.

I must just as a personal aside say to Secretary McNamara that I recall us meeting across witness tables back in the late 1960's, and the circumstances were different then. But I don't know either of us would have imagined then that within the short space of time since then we would have an opportunity like this to debate the hopeful possibilities of a more peaceful world. Having the Berlin Wall open and the barbed wire down on the Hungarian border and things changing as rapidly as they have, I think would have been probably beyond our fondest hopes from the vantage point of the late 1960's. In any event, we find ourselves in this room today addressing these issues, and I take great hopefulness from many of the things that you have said.

I think it should be said about you, in addition to your outstanding service in public capacities as Defense Secretary, that you were also a leading industrialist at Ford Motor Co., and so your ability to think about how the world is changing in both the private and the public sectors is a very helpful resource to this committee.

I was struck by your comment, in a sense echoing the words of former President Eisenhower, whose parting message for us when he left office was to warn us about the continuing pressures of the military industrial complex. In choosing to highlight that as he was leaving, I think he left us a powerful message which you reinforced today when you yourself warned us to be careful about the continuing pressures that we may have with respect to weapons systems or defense overspending at a time when things are clearly changing on the world scene and we need to move in a different direction—not unwisely or not imprudently. Obviously we need to act carefully, but we ought not succumb to the argument that more and more military spending is necessarily in our national interest.

Also, unless you mentioned it prior to my coming into the room, I have not heard you say much yet today about burden-sharing by our allies. That is a key issue in my mind, particularly as you look at our growing debtor nation status and the enormous financial reserves that other nations are building. It seems to me, in terms of the common defense of the free nations, and others that want to become free nations, that nations that have amassed great financial strength and new financial strength in recent decades need to step up to the plate and devote more of their resources to this common burden, and I think very importantly so in Europe. When you look at our bilateral trade deficit with the European nations and Europe 1992 coming on line, I think it is inappropriate to continue to spend tens of billions of dollars there. I think that, without in any way beginning to sever our relationships, we must balance

out the responsibility each nation carries. That assessment is long overdue.

I want to just say a couple of other things. You mentioned doing away with the rail-mobile MX system. I strongly agree with that. My home State of Michigan is one of seven States that have been asked to develop this rail-mobile system and to take these missiles out of hardened silos where they presently are in Wyoming—I think, in fact, safer and sounder in that setting where we already spent the money—and to spend several billions of dollars going to the rail-mobile system. I think it's a mistake. I think it helps us to try to avoid that with important testimony from someone like yourself, who is a bona fide expert on this issue.

I would just finish with two other things. You estimate that we can save, by your reckoning, $138 billion in otherwise projected defense spending going out into the early 1990's. I would hope we could do at least that, and I think we ought to target for ourselves a strategy that captures that kind of saving and tries to enlarge on it.

Related to that, we are now witnessing the collapse of communism, I think, as an economic and as a social system—the evidence is everywhere—You raised the question of whether or not Gorbachev can succeed and commented on speculation by some experts as to his durability. It would seem to me that it may very well be in our interest to help Gorbachev succeed, and I'd like your thoughts on that. Not that we can pick and choose leaders in other countries, but in terms of the forces that have been let loose, that are constructive, that seem to offer real benefits for us, shouldn't we perhaps be thinking in terms of strategies and bilateral relationships and circumstances that would, in effect, help a more progressive and a new kind of leadership that's breaking the old patterns and the old molds to have an opportunity to succeed. And if so, how might that be done?

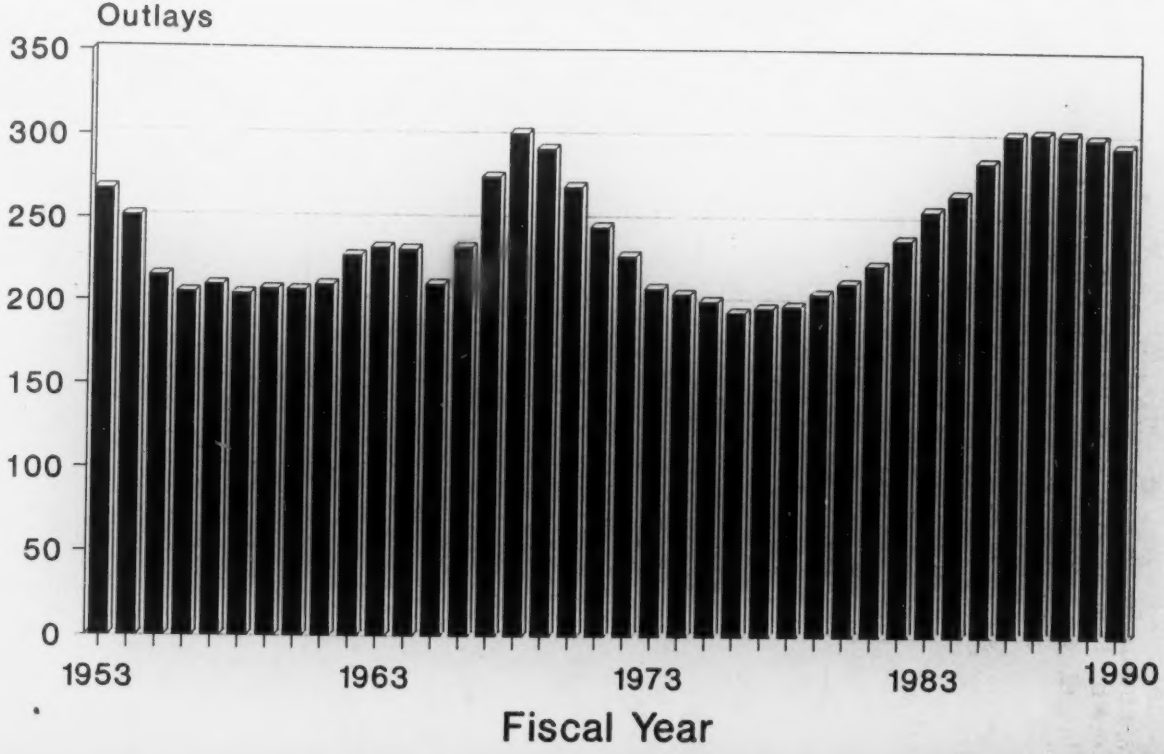
With that, Mr. Chairman, I thank you for the chance to make those comments.

Chairman SASSER. Thank you very much, Senator Riegle. I note on the question of burden-sharing, which is almost becoming a passe subject now, that the Secretary indicated that our NATO allies allocated about 3 percent of their GNP to defense efforts, and we are allocating between 6 and 7 percent—if memory serves me correctly. I see our friends, the West Germans, are already planning on a 20-percent reduction in ground forces by 1991. Their plans are to reduce their ground army I think from 476,000 men to 400,000.

Mr. Secretary, you noted in your testimony that the current defense program of approximately $300 billion in outlays is 35 percent more in real terms; that is, in real dollars corrected for inflation than we were spending a decade ago. And we're spending now virtually the same that we spent at the height of the Vietnam war. In other words, we're spending now and have been spending for a number of years about the same in constant dollars that we spent for 1 year at the very height of the Vietnam war.

I've prepared—our stalwart Budget Committee staff here, who do an excellent job, has prepared a chart here that details defense spending in constant 1990 dollars, from 1953 through 1988. And we see by looking at that chart that the buildup of the 1980's was the largest and longest peacetime buildup in the history of this Nation.

DEFENSE SPENDING 1953 - 1990
(Billions of $1990)



Second, despite marginal cuts in the President's defense budget request over the past several years, this buildup, for all practical purposes, I think continues to this day. In fact, prior to the start of this massive buildup—and I think we'll all agree that President Carter, I believe in 1977 or 1978, agreed with our European allies we would begin increasing defense spending by about 3 percent a year in real terms, and he started that program in 1978 or 1979. Still, we had this massive buildup beginning in 1981.

Now, as we look at our chart here, we find that prior to the beginning of this building in 1981 and 1982, the post-World War II peacetime defense budget of this Nation averaged about $215 billion a year in 1990 dollars. Now, that's about $85 billion more than we are currently spending.

Now, based on your experience over the decades as Secretary of Defense and in other positions, could you describe in general terms how the threat facing this country today as we enter the 1990's compares to the threat that we faced in the 1950's, the 1960's, the 1970's when we were spending so much less on defense when you exclude the Korean war and the Vietnam war, where we were actually in armed conflicts on the periphery of Asia?

What is the threat that we have conceived here in the decade of the 1980's in your view that so exceeds the threat that we saw in the decade of the 1950's, the 1960's, and the 1970's?

Mr. MCNAMARA. Well, I won't argue whether we should have built up in the 1980's, as the chart indicates we did. And I am even prepared to accept that the threat may have changed because of the build-up. But even accepting that that may well be, why, in my opinion, put the past aside and just look at the threat today. I think it's generally recognized by military leaders and political leaders of the West that the threat faced by NATO, the threat faced by the West today is less than at any time in the last three decades. Certainly it's less in my opinion.

There is a very interesting article on the front page of this morning's New York Times that talks about the Army's reexamination of its force structure. There is implicit in that article a statement by the Army Chiefs that the threat has been, so reduced, that the Army must substantially restructure it forces and reduce the numbers of people and the dollars it spends. It is simply the latest opinion that I have seen that supports my view the threat has changed.

Chairman SASSER. Well, what I want to point out, Mr. Secretary, if I can, you were talking in terms a moment ago of reducing defense spending down to, as I recall, $265 billion.

Mr. MCNAMARA. For fiscal 1994.

Chairman SASSER. For fiscal 1994.

Mr. MCNAMARA. That is correct, sir.

Chairman SASSER. And the point I wish to make by this chart is that in the so-called peacetime postwar period—that is, in the post-Korean war period and in the post-Vietnam war period—the average defense budget in constant 1990 dollars was $215 billion.

Mr. MCNAMARA. Therefore, I think the burden of proof is on me to say why $265 billion in 1994.

Chairman SASSER. That's the question.

Mr. MCNAMARA. Instead of $215 billion. That's a perfectly reasonable question. I guess I have two answers. The first is that as a

single human being, without a staff, in the time available to me, I couldn't identify specific reductions that would take the level from, say, $265 billion down to $215 billion. Secondly, and more importantly, I have not done what I think must be done before there is a complete restructuring of military forces as would be implicit in a $215 billion budget for 1994. Before the defense budget is cut by that degree, there must be a complete reappraisal of our foreign policy, our security commitments, the threat we face, the military strategy and force structure required to meet the reduced threat. And that is going to take some time. It should be possible to do it within, say, 12 months. After it is done, I'd be amazed if you aren't considering for fiscal year 1994 a budget well below $265 billion.

Let me just give you one illustration. There has been no discussion whatsoever about naval forces in the arms negotiations that are now underway. Why not? What do we have the naval forces for if they aren't in part, and in very large part, to be a protection against Soviet aggression? That's why we have the large naval forces in the Pacific. That's why we have the large naval forces in the Mediterranean and in the Indian Ocean.

Now, if that threat of aggression, Soviet aggression, decreases substantially, as I think it will, will we continue to need such large naval forces? I don't believe so.

But it's going to take some time to intelligently restructure the present force and incorporate the results in the budget for fiscal year 1994. That I haven't done, it can and should be done before we enter 1994.

Chairman SASSER. Well, Mr. Secretary, I don't mean to imply that we ought to start off on a mindless cutting of the defense budget that brings us down to $215 billion by 1994.

Mr. MCNAMARA. Well, that's a perfectly reasonable question.

Chairman SASSER. I think, quite frankly, that you're taking a very thoughtful approach in terms of trying to get us down to $265 billion by 1994, and I think it would be the height of folly to simply set out on a program of mindless cutting, as I think you have pointed out in your testimony, without some overall strategy as to where we're going and how we're going to get there. But what we've seen in the past few weeks is absolutely mind-boggling. What we have seen is the Warsaw Pact order of battle reduced by 55 divisions in the space of just a few short weeks. And the Soviet Army in Eastern Europe would be, in my judgment, at the present time allocating substantial resources to defending its own lines of communications through Eastern Europe rather than relying upon its Eastern European allies to press an offensive.

Just 2 weeks ago, the Washington Post and the New York Times reported that the United States intelligence community in a fundamental reassessment of the military balance in Europe has concluded that since the mid-1980's the Soviet Union and the Warsaw Pact allies had been incapable of quickly launching a so-called standing start massive attack against the West. Now, that is a conclusion that undermines the assumptions behind existing United States and allied strategy and force deployments.

Now, this conclusion was reached before the Berlin Wall was torn down and before the upheavals that have occurred that could obviously severely further reduce the danger of an attack.

Now, my question to you, Mr. Secretary, is: Doesn't this indicate that U.S. military strategy and defense budgets and the threat they're intended to counter may have been mismatched for several years now in the sense that we were preparing to meet a standing offensive on the part of the Warsaw Pact nations and building a force structure in NATO and Western Europe to counter that threat, and we find now that perhaps, at least according to our own intelligence assessments, that was now the case.

Now, in view of that, aren't immediate adjustments in our force deployments justified?

Mr. MCNAMARA. I believe some immediate adjustments in NATO's force deployments are justified, and that would certainly include some adjustments in U.S. force deployments. I have built some of these into my estimates for fiscal years 1992, 1993, and 1994.

On the basic point you make, I think you're absolutely correct. The recent evidence indicates that we have exaggerated Soviet strength and underestimated NATO strength. I would add that that's not a function only of this administration or of the last administration. This has been going on for as long as I've closely followed the defense program, for 30 years. We, the United States and the West, have consistently exaggerated Soviet and Warsaw Pact strength and underestimated NATO. Now, in part, that was to be expected. We had imperfect sources of information. And under those circumstances, it was customary to look at what was called "the worst-case" scenario. I think that was probably intelligent, prudent under the circumstances. But our information has increased. The reports you allude to are on the record. The CIA has substantially changed their appraisal of the Soviet threat, the Warsaw Pact threat, and we should change our response. And do so soon.

Chairman SASSER. One final question before turning to the distinguished ranking member. Mr. Secretary, I had been under the impression that one of the reasons that we relied to some extent on tactical nuclear weapons in Europe, and one of the reasons that we insisted on the option of nuclear weapons in that theater, was to counter-balance the numerical superiority of the Warsaw Pact nations in both manpower, tanks, artillery, et cetera.

Now, conversely, we have enjoyed a naval numerical superiority, both, I think, qualitatively and quantitatively, over the Soviet Union for a period of many, many, many years. I was chagrined to read in the dispatches coming out of Malta that President Bush had deflected an overture from Mr. Gorbachev to remove tactical nuclear weapons from the navies of both nations, both the United States and the Soviet Union.

Now, if I'm right that we relied upon nuclear weapons in Europe to counteract Soviet numerical superiority there, why would we object to removing nuclear weapons—these are tactical nuclear weapons, ship-to-ship weapons—from a United States Navy when we enjoyed numerical superiority there?

Mr. MCNAMARA. It's an example, I think, of rigidity of thinking. I suspect the Navy is divided on this issue. I have long thought our navy would be more secure if we could eliminate nuclear weapons from both United States and Soviet naval ships. Our navy is highly

vulnerable to attack by Soviet nuclear weapons. I doubt very much that the Soviets would initiate the use of nuclear weapons against the Navy, but if they were to do so, we're highly vulnerable. We'd be far more secure if we would negotiate an elimination of tactical nuclear weapons from both navies.

Chairman SASSER. Well, I couldn't agree with you more. We're the ones with the carrier battle groups that are——

Mr. MCNAMARA. It is those groups that are particularly vulnerable.

Chairman SASSER [continuing]. Protected from horizon to horizon by vessels.

Mr. MCNAMARA. Exactly.

Chairman SASSER. That kind of rigidity of thinking just escapes me.

Senator Domenici.

Senator DOMENICI. Thank you very much, Mr. Chairman.

Secretary McNamara, might I first compliment you on the overall notions you have given us. Only time will tell whether your assessment of how quickly we should change the military structure to accommodate to a new American policy in a changing world. We'll see that evolve over the months to come. But there shouldn't be any doubt, with reference to the Soviet Union, that we're living in a very changing situation.

I wonder, however, if we might just discuss for a minute a bit of history. I note that in looking at defense expenditures for the United States, only one time in modern history—the year was 1940—did the United States spend less than 2.0 percent of our GNP on national defense. I need not mention the ominous nature of 1940, which was followed by the Second World War. The Second World War may not have occurred had we understood our role in the world. We surely understand it now.

Following World War II, I find that once, in 1948, we were as low as 3.7 percent. From 1948 to the present, I find that we were between 4 and 5 percent only five times in that entire period; 1949, 1977, 1978, 1979, and 1980. I clearly am not one who wants to minimize the earth-shaking effects of the desire for freedom and the failure of communism and Marxism—communism as a political governance system and Marxism as an economic system. Mr. Secretary, you indicated—and I think you stated it twice—that you want the United States to always be prepared under the leadership of her President to respond to security needs and security interests in the world. I wonder if you might just elaborate on the process of risk assessments. For example, with reference to the ability to start a ground war in Europe, I think our own military thought we would have 15 days of warning. Now they believe it may be more like three times that. How would you perceive, in a few paragraphs, that the process should go on in the United States to make these determinations?

Clearly, we can't make them up here with each of us making our observations. I don't believe you can, and I don't think you intended that in your testimony here today. How would you think that should occur, Mr. Secretary?

Mr. MCNAMARA. I certainly agree with what you said about my intent, Senator Domenici. I don't believe that any single individual,

me or anybody else, can be an authority on the defense program and the amount that should be spent on it—whether it be for this year or future years. I think perhaps we can have some opinions as to the process, which is the point of your question, that should be undertaken to review the defense program in a period of great change in relations between East and West. And that really is the point of my testimony.

Frequently, over the past 30 or 40 years, the defense program has developed as a result of pressures from various parts of our society, pressures that are not directly associated with military requirements. The chairman referred to President Eisenhower's reference to the military industrial complex. As I have reread some of the history of the 1950's, I have been very sympathetic to President Eisenhower. He was quite frustrated at times by the pressure and the success of forces in our society that were moving the defense budget to levels beyond what at least he thought was required from a military point of view.

And the basic point I want to bring to your attention this morning is my belief that now is the time to ensure that we lay a foundation for future defense budgets that will be representative of military requirements and not of high pressure lobbies. That's really the main message I bring to you. The process of shaping future defense budgets should begin with the reappraisal of our foreign policy. What is our foreign policy? For example, are we going to act, unilaterally in procurring our foreign policy objectives?

I was at a meeting of the ex-Secretaries of Defense a week or two ago. It was in a public meeting, and, hence, I feel free to quote from it. One of the ex-Secretaries was saying, "Well, we've got to have the navy, you can't touch the navy." But I believe we should ask: "Why is the navy at its present strength?" In large part, it is because of the Soviet threat. It was perfectly appropriate that we have a navy structured to meet what we viewed as a very large Soviet threat.

But if that Soviet threat changes, should we not reconsider our navy structure? Of course, we should. In particular, should we not consider how we would react to such future contingencies as an attempt by Iran or Iraq to close the Persian Gulf. Senator Riegle mentioned burden-sharing. I very much agree with his feeling that we should share burdens. Are we the only people dependent on Persian Gulf oil? Of course not. The Japanese are far more dependent on Persian Gulf oil than we. The West Europeans are also far more dependent than we on Persian Gulf oil. Should we not therefore share the burden of maintaining the free passage of oil through the Gulf with other nations, possibly even the Soviets. These are all perfectly appropriate questions, and they relate very much to the structuring of the navy. And it's that point I want to try to put before the committee and the Congress.

Senator DOMENICI. I'm going to try to get on——

Mr. MCNAMARA. I apologize for the long answer, sir.

Senator DOMENICI. That's fine. I enjoy listening to your thought process.

Mr. Secretary, then, if I understand you correctly, what you're really suggesting for this country is that the President of the United States, the appropriate Cabinet officials, the Joint Chiefs of

Staff, in the near future, that they assess and reassess and establish and recommend to us and the American people what policy the United States should have in the world and recommend the defense that fits it, and then we ought to engage ourselves in determining whether they appear to be on the right track or not.

Mr. MCNAMARA. That is exactly it.

Senator DOMENICI. Is that essentially it?

Mr. MCNAMARA. That is exactly my point.

Senator DOMENICI. And I think you would agree, would you not, that for those who think more should have been done already, that things have changed much more rapidly than anyone could have expected even a year ago. Is that a fair statement?

Mr. MCNAMARA. That certainly is.

Senator DOMENICI. You have been extremely fair, not Democratic or Republican, but American. You would agree that this administration and the President needs some time. Is that not correct?

Mr. MCNAMARA. Absolutely.

Senator DOMENICI. Now, Mr. Secretary, let me just ask two more questions. You assume in your statement that the Soviet Union has nowhere to go but with perestroika, Gorbachev-style—whether he's around to lead it or gone; that's what I read in your statement. In other words, you ask yourself the question "What if I'm wrong?" And then you say, "But I can't be wrong because it's going to happen." Is there no concern that while they still retain a very major military force and nuclear weapons and the other things, that they haven't yet settled in on their policy in the world, and that maybe we ought to be a bit cautious about that?

Mr. MCNAMARA. Sir, if I left the impression you've attributed to me, I misstated my views. I don't believe there is any alternative to Gorbachev's perestroika, his economic and political reforms, if the Soviet Union is to deal effectively with its basic problems. But that isn't to say that a successor won't revert to a Stalinist foreign policy, an aggressive approach to the West. I think that is unlikely, but it is possible. And as a nation, we must protect ourselves against that. That's exactly the point I make. And I think we can do so while at the same time restructuring our foreign policy and our defense program on the assumption that Gorbachev will succeed. If I am wrong in that assumption, I will have protected ourselves against a reversal of that.

Senator DOMENICI. This might not be a fair question, but I am going to ask it. I gather that there are many around who think once we get this industrial defense complex under control and squeeze it down, the American economy is going to be in great shape and humming along. Frankly, I don't assess things quite that way.

First, I think whatever we spent in the decade from 1979 to 1989, albeit we might have done it for less, it worked. Some might not think it was part of bringing the Soviet Union down to where they are today. I believe it was an absolute integral part. Nonetheless, it seems to me that America's future is tied to an American economic sector that is viable and experiences constantly increasing productivity. It seems to me that we have to continue high productivity and sustained GNP growth. Without that, all of the good things we are talking about cannot be achieved.

I do not believe—and I wonder if you do—that, by reducing defense spending, we can dramatically, almost by itself, turn the American competitiveness and sustained productivity around. Do you think that those are quid, one for the other?

Mr. MCNAMARA. No, I do not believe there is any direct relationship between a reduction in defense expenditures and the solution of some of our very serious economic and social problems to which I alluded and to which you referred in your opening remarks.

I think, however, that for several decades we have been constrained psychologically by an obsessive fear of Soviet aggression, constrained from dealing with these social and economic problems. I believe that the removal of that constraint by a recognition that (a) the Soviet Union has been much weaker politically and economically than we had believed, and (b) their leader is now removing their capability for a successful military attack, can release us, psychologically, to begin to deal more effectively with our programs.

Senator DOMENICI. I have a couple of more, but I yield at this point. My time is up.

Senator RIEGLE. Let me just say, I am ready to go, but if it follows on and you want to finish your thought, will you please do so.

Senator DOMENICI. Thank you very much.

Mr. Secretary, given your background and the time you have spent analyzing this defense situation, I really appreciate your frankness. I appreciate your frankness in terms of what you were trying to do and then your recognition that this has to be a very major effort on the part of the administration, the President and the Congress collectively. I just wish as thorough an analysis of what is failing in terms of America's increased productivity and its potential to compete was done in just as frank a way.

I am convinced that the deficit is a major problem and we ought to start dramatically reducing it. I am also convinced that this country is filled with economic inefficiencies that we take for granted, that we assume we can live with because we did 30 or 40 years ago. Now there is a new and different world that borrowed techniques from us and there are others doing better at our own game. I find this really is bothersome.

I will give you just one example—science and technology. You state in your statement that nuclear arms agreements are important, but that, clearly, there need never be a weakening of our nuclear deterrent. Well, that deterrent has brought research and development into national laboratories that is beyond anything the private sector in the United States has available or uses, and I believe the gap between applying science to the marketplace of commerce, that gap between this country and her adversaries is absolutely disastrous.

I do not see how we are going to make it if we do not find ways to bring our great science, as rapidly as our adversaries, bring it into the marketplace of commerce. I wonder if you share that concern, as you watch the evolution of things, and if you wonder whether we should keep our science and research at high levels in this country and bring the private sector into it, so we can use it better.

Mr. MCNAMARA. Yes I do Senator. I am so concerned about trends in our society affecting our productivity that I recently made a private contribution to an organization to try to find out what to do to convert the situation. I do not think we know what to do.

If there were no financial constraints, I do not think we know what action to take. I do not believe we can do it without more Government money, but money alone won't solve the problem. I do not think we know how to achieve the objectives you have pointed to. I think we ought to find out, and in a very tiny way I am going to try.

Senator DOMENICI. Thank you.

Thank you, Mr. Chairman.

Chairman SASSER. Senator Riegle.

Senator RIEGLE. I want to continue on exactly that line of discussion. I referred earlier to your industrial career and leadership prior to coming into government which, I think, puts you in a position to try to cross-relate this enormous transition that we now must go through as a national economy.

Let me give you some numbers for benchmarks to think about this, and this will have a bearing on this issue of burden sharing and our relative position in the world today. As you know, we have a huge trade deficit and we are adding international debt as a nation at the rate of about $1 billion every 3 days. The New York Federal Reserve Board has estimated that by probably 1991, we are going to owe the rest of the world $1 trillion net. This nation was a surplus nation just about 3½ years ago, so we have had an enormous change in circumstances.

Looking at it on a bilateral basis, if you take, say, the Japanese this year, who have obviously excelled in managing their economic strategy very effectively, they will have a net surplus in their foreign trading accounts of about $97 billion, give or take. We are going to have an additional deficit this year as a country of about $125 billion. These are approximations. But the difference between the two, over a 12-month cycle there is a difference of $222 billion in their advantage.

What they are managing to do is invest their money very skillfully, both in research and development, in capital equipment and in their people. You see it in educational performance levels; they have a high school dropout rate of about 2 percent. Our national high school dropout rate is about 26 percent. But you can take it right across the society.

Two of the things that bother me the most right now in a comparative sense is they are spending roughly twice in dollar amounts in capital equipment per-worker to enhance productivity than we are. They have a two-to-one edge in that area.

In terms of equity capital investments, this year the Japanese, with a GNP of roughly 60 percent the size of ours, will raise and invest over five times the amount of equity capital in their private sector businesses as we will manage to do in the United States.

The differentials are so stunning that they are hard to make sense of, because they have grown up so rapidly. That is just one bilateral relationship. We could take Korea, Taiwan, other countries in Europe and so forth.

When you bring that back over to the question of burden sharing and the common defense and who pays what share—we have been in the habit of stepping up and paying the lion's share for a long time, and other nations have become accustomed to letting us do that—I am concerned about the underinvestment in our own society and the capacity of our private sector to increase capital investment, to overcome the miserably low savings rate we have, and the impact of all this on American productivity. We are lagging very, very far behind.

I think that problem, in its own way, is probably the most severe problem that we face right now. Now, I think that the end of the cold war, to the extent that it is here and there is a lot to suggest that it may well be here, may give us the opportunity to change our emphasis and change our direction, but I think we have to move with some speed, because I think we are late.

I think we have got sort of a Maginot Line problem, where we kept the defense buildup going so long that we have gone past the point of being able to get any real yield out of the dollars we are spending. And whether we are going to talk about a rail MX system or other massive investments in nuclear warheads that we dare never use, those tens of billions of dollars are desperately needed in other kinds of investments in our own society. If we shift those resources, we can start to win in this global economic war, which is one that I think we have been measurably losing.

Now, let me just say all of that by way of getting to this question: You estimate that we can save $138 billion over the time period in the early nineties by scaling down our defense expenditures. Against the backdrop of my comments and Senator Domenici's earlier and Senator Sasser's, I would like you just to think aloud as to how that $138 billion might be allocated. Should we keep it and spend it through the auspices of Government, for various Government-driven activities, whether it is the drug war or to beef up education or to spur research and development or to provide tax credits for a certain kind of activity, or should we, in effect, withdraw $138 billion worth of government spending, let that money accrue in the private sector and find its own path into whatever form or use that it will take?

How does a nation, now confronted with a massive change in the global situation and find with very important repositioning issues, address the question of where that $138 billion should go?

Mr. MCNAMARA. Senator Riegle, in the few minutes that I would have to answer your question, I do not think I could properly put forward my views on how to defense savings to address pressing national problems. However, I very much agree with your concern about the place of this Nation in the global competitive world that lies ahead of us.

Having said that, I should add that I do not believe the trade deficit with Japan, to which you alluded, is a function primarily of Japanese constraints on imports from this country or on subsidization of Japanese exports. I would guess that 70 percent of the trade deficit is a function of the factor you pointed to, noncompetitiveness on the part of the United States.

Second, I do not believe that burden sharing—and I agree we should engage in discussion of the subject with Japan—I do not believe that burden sharing will contribute significantly to solving the problem you point to.

Japan today is spending roughly 1.3 percent of GNP toward achievement of our common objectives relating to security, assisting the developing countries, and preservation of the global environment. We are spending on the order of 6.3 percent, the Europeans are spending on the order of 3.5 percent. There is no justification for Japan contributing only something on the order of 1.3 percent versus our 6.3 percent—I should add, however, I would not wish to see their military forces enlarged.

Much as I would like to see the United States move toward redressing the imbalance in burden sharing I do not believe that balancing the burden would bring a solution to the problem that you referred to. On the contrary, the system lies within our own society. We must address it. It is going to require——

Senator RIEGLE. But let me ask you this——

Mr. MCNAMARA. Could I just take one second?

Senator RIEGLE. Yes.

Mr. MCNAMARA. I am sorry to take so long, but it is a very, very basic question. We must address it, whether we have this so-called peace dividend or not. From my point of view, the first priority in this society is addressing the point you raised. We can afford to do it.

There is not a person in this room who can tell me the incremental Federal income tax rate on my incremental earned income when I came to Washington. That was 29 years ago, at the end of a Republican administration, many years after the end of the Korean war. I paid an incremental Federal tax of 91 percent on my incremental earned income. Today, the maximum is 28 percent.

We cannot say we cannot afford to address these problems. Whether we have the peace dividend or not, we must address the problems you have pointed to. I hope that the release of our psychological strength, by the removal of the obsessive fear of Communist aggression, will permit us to reorient our thinking and take the action that is required, with or without the peace dividend.

Senator RIEGLE. Well, I think that is a very important statement and I appreciate your making it, because it seems to me that, in shifting our focus, we have got an enormous task ahead of us here at home. We have got a job of really gearing up our economy and figuring out a way to engineer a surge in American output and productivity of a stunning scale.

I would assert that the gap we have to close, in terms of these international competitive trend lines, requires that the peace dividend be wisely invested, some in the public sector, some in the private sector. Even more than that, it must be used to drive up our levels of research and development expenditure, our savings rates, our capital investment per worker, and our educational attainment level per worker.

It seems to me that, in effect, we have been debating the old war and the cold war and that, in a sense, has been changing its form and its circumstance. In fact, we have an entirely different kind of an economic, global, competitive war, if you will. I do not want to

call it that, as such, but you can win or you can lose and you can slide backward, and we have been sliding backward.

So, now it seems to me the energy that has been going into this incredible concentration on defense strategy and defense spending and defense this and defense that, needs to be shifted. We have to think about how we excel in this new international competition; our living standard is going to depend on it.

We cannot have housing for people or health care or an effective drug war or anything else, even a decent living standard in the future, unless we find a way to gun this private economy of ours way beyond where it is presently performing.

So, I think this is an area where someone like yourself, who brings the mix of both sets of skills from your own background, can perhaps help us make the transition into noncold war thinking, in terms of how we engineer an American surge. That is really the issue, and I gather that is your view as well.

Mr. MCNAMARA. It is, indeed.

Senator RIEGLE. Thank you, Mr. Chairman.

Chairman SASSER. Thank you, Senator Riegle.

Just two very quick questions from me. I see we have been joined here by Senator Grassley and we kept Secretary McNamara here now for almost 2 hours, and Dr. Korb is waiting very, very patiently and we appreciate——

Senator GRASSLEY. Mr. Chairman, I do not have any questions of Secretary McNamara, but I did want to take whatever time, the first time I get, to make an opening statement.

Chairman SASSER. Well, we will certainly do that just before the next witness.

Mr. Secretary, two quick questions. You indicated in your opening statement that some experts believe that Mr. Gorbachev may have a year at most to continue to lead the Soviet Union. Now, others have indicated that we have a vested interest in seeing Gorbachev succeed and a vested interest in seeing stability in Eastern Europe.

The question has been raised, in the event there is unrest in the Soviet Union, in the event that there is even revolution in the Soviet Union, which is not inconceivable at this particular point in history, things are moving so rapidly, who would control the nuclear warheads in the Soviet Union if there is profound instability.

My question to you, Mr. Secretary, is in the event we find that the Eastern Europeans or the Soviets are having difficulty making it through this winter—there is already evidence of some food riots, I was reading, in the Soviet Union—do you think it would be a wise policy on the part of the United States, and acting in concert with the Western Alliance, to perhaps provide some food stuffs or some means of getting through the winter to those in Eastern Europe and even in the Soviet Union, if necessary?

Mr. MCNAMARA. The short answer is I do, Mr. Chairman. I would like to expand on it just very briefly. I do believe that it is in our interest to assist President Gorbachev in moving down the path he has laid out.

I think, however, that we should not provide that assistance in the form of subsidized transfers of capital. His economy is noncompetitive in the world markets today. It will never become competi-

tive, if they rely on subsidized financing, so I do not favor that. But I do favor assisting them and I think there are two ways in which we can do it.

No. 1, we can permit him to be in a position to say to his people, "I told you that we must transfer resources from defense to nondefense, I know we can't do that while maintaining our security, without reducing political confrontation with the West, I've set about doing that and you see now the results. Political confrontation is being reduced; the risk of military conflict is being reduced, we can safely shift resources."

We are in the process of putting him in a position to say that. That, in my opinion, is the greatest possible assistance we can give.

Beyond that, I think we should address the problems you pointed to. I do believe we should provide credits to the Soviet Union for food imports and for other purposes. I think we should waive the Jackson-Vanik amendment as soon as he legislates free movement of his people. I think we should negotiate the trade agreement which he and President Bush alluded to in Malta. This will help immensely.

With respect to East Germany, and Poland in particular, the problem is much more difficult and much more complicated. I think Poland needs tremendous assistance from the West to get through this winter, and I do not see it yet available. I hope we in the United States will provide more.

Chairman SASSER. Thank you, Mr. Secretary. There are many other questions I would like to ask you, but in the interest of time, I am going to defer those.

Senator Domenici?

Senator DOMENICI. I have just one. Somewhere in your statement you mentioned the strategic defense initiative and I think you said it should be reduced and relegated to a posture of research. Mr. Secretary, I wonder if the strategic defense initiative was not anathema to the Soviet Union in some way, as we worked together to achieve some more stability and understanding. I wonder if the strategic defense initiative is not a good thing to have in this changing world.

I am of the opinion that our nuclear deterrent, contrary to much popular belief, is going to be with us for a long time. Countries are being added every couple of years to the nuclear pool of nations, and it does seem to me that, while we ought to work with reference to having understandings with everyone about it, that the strategic defense initiative, in a sense, might take on a more valued and valuable position in this kind of a changing world than it might have when it was perceived to be singularly directed at the Soviet Union.

Mr. MCNAMARA. I know time will not permit a really thoughtful discussion of the issue, Senator Domenici, and it is a very important one. I would simply urge that the Congress, if it wishes to appropriate funds for more than research for the SDI, do so only after it has had a very thorough discussion with the administration, with the Defense Department and with the Chiefs of the strategic foundation for whatever anti-ballistic missile system the Congress wishes to appropriate funds for.

The system you are alluding to is not the system that President Reagan put forward in that famous speech on Mar. 23, 1983. His system, even recognizing that it might have been exaggerated rhetorically as "rendering nuclear weapons impotent and obsolete" was nonetheless very clearly a system designed as a protection of our population against major attack.

Quite frankly, I do not think such a system is feasible technically. Nor do I think it is strategically desirable. In any event I would urge before you appropriate SDI funds for more than research, you have presented to you a very clear statement of system design and purpose—is it a large population protection system or is it designed to protect against Iranian missiles or some other accident. After that should you hear from the Chiefs. Obtain their evaluation of the system. Strategically, would it be a stabilizing factor or a destabilizing factor. In my opinion, the Chiefs would not have supported the systems that have been discussed so far. They will not support, nor should they support, a limit on offensive strategic nuclear forces, in the face of unlimited SDI deployment by the Soviets, which, of course, would be permitted if the United States were to deploy the SDI as it was originally conceived.

So, these are extremely complicated points I would simply urge that you consider thoughtfully. I know you will as you appropriate funds.

Senator DOMENICI. Thank you.

Thank you, Mr. Chairman.

Chairman SASSER. Senator Riegle?

Senator RIEGLE. No further questions.

Chairman SASSER. Do you have any questions of Secretary McNamara, Senator Grassley?

Senator GRASSLEY. No.

Chairman SASSER. Mr. Secretary, I want to express my appreciation and the appreciation of the committee for your appearance here this morning. Your testimony has been very helpful to us and, again, our profound thanks for your appearance.

Mr. MCNAMARA. Thank you. It is very nice of you to have me. I have enjoyed it.

Chairman SASSER. Before calling on our next witness, we have been joined by Senator Grassley and I understand Senator Grassley has an opening statement and we would be pleased to receive that at this time.

OPENING STATEMENT OF SENATOR GRASSLEY

Senator GRASSLEY. Mr. Chairman, I am not intending to be facetious when I suggest the timing of this hearing is very excellent, and that is notwithstanding the inclement weather and the recess.

For sure, we are having these discussions in the midst of dramatic political change throughout Eastern Europe and these changes will have a significant impact on our policies and budgets. There is no question that, even without dramatic changes in the world, the defense budget would have continued to decline in real terms, that the days of the defense budget growth were over.

Now, given these two realities, a rapidly changing world and austere fiscal constraints, the question then becomes how prepared is

the Defense Department to respond, how effective will we be in setting new objectives and priorities and efficiently allocating scarce resources to those priorities.

Now, in my view, the Defense Department is not yet capable of dealing with change and uncertainty, absent radical reform, and notwithstanding the very good efforts of Secretary Cheney and the President.

Now, Dr. Korb points out in his testimony that the Department failed to revise a national strategy and to meet a deadline for producing the Defense Planning Guidance by October 1st. This is largely because one of the services "gamed" the exercise to down-select objectives for the planning guidance.

This problem, Mr. Chairman, illustrates just how difficult it will be to reform the Department of Defense, and it is something that we should all be aware of. If we are going to lead change, we have got to be concerned about it.

In my estimation, the biggest obstacle to reform is the dynamics of defense policy and budget decisions of previous years. There is a lot of political capital invested in the status quo, not just by the bureaucracy, but also by Congress.

The new constraints that we are faced with put us on a collision course with business as usual. I am not so concerned right now with the level of funds for future defense budgets as with the way that this build-down is managed. Thank God, Secretary Cheney and the President have accepted the reality of diminishing resources.

What we need to do now is to focus our efforts on encouraging the Secretary to reverse this dynamic, so that we are making decisions based on a national strategy, rather than on a political strategy, and we can start by changing the way we in Congress influence defense policy and budgets.

On Thursday of this week, I am going to release a paper that assesses the status quo and the steps needed to counter it and effectively manage this build-down. It is my belief that the administration has put forth a serious reform effort, but it is a formidable task. A lot of changes from what they anticipated needed to be done will have to be done if reform is to be accomplished, and their efforts deserve our support and encouragement. But from the outside we are going to have to see that more dramatic changes are being made than are suggested so far.

Finally, Mr. Chairman, I think that I need to thank you for holding this hearing and I think that the distinguished panel of witnesses that you have are outstanding people for bringing insight and suggestions to us, and I look forward to joining you this coming year as we meet these problems. This forum of the Budget Committee can be a very worthwhile forum for bringing about change, as the plateauing of the defense budget in 1985 and succeeding years was brought about as a direct result of investigations made by the Budget Committee.

Thank you.

Chairman SASSER. Thank you very much, Senator Grassley, for that very excellent, I might say very perceptive statement.

We are delighted to have as our next witness Dr. Lawrence J. Korb, if I might say, a distinguished and most perceptive public

servant. Dr. Korb has been intimately involved in structuring our national defense policy during the 1980's, and we are very pleased to have the benefit of his views.

I might say that Dr. Korb is presently the Director of the Center for Public Policy Education at the Brookings Institution, and prior to coming to Brookings he was Dean of the Graduate School of Public and International Affairs at the University of Pittsburgh.

He has also served as Assistant Secretary of Defense, with key responsibilities for manpower and reserve policy, from 1981 through 1985. Dr. Korb is the author of numerous books and articles on national security and, Dr. Korb, we thank you for coming here this morning in a snow storm. We thank you for your patience and we look forward to your statement of observations this morning.

STATEMENT OF DR. LAWRENCE J. KORB, DIRECTOR, CENTER FOR PUBLIC POLICY EDUCATION, SENIOR FELLOW IN THE POLICY STUDIES PROGRAM, BROOKINGS INSTITUTION

Dr. KORB. Thank you very much, Mr. Chairman. It is both a privilege and a pleasure to be here with you this morning.

I joined the Navy at about the same time Secretary McNamara became Secretary of Defense. When I got out of the Navy and went back to graduate school, I decided to write my dissertation on Secretary McNamara's impact on the Joint Chiefs of Staff and the defense budget, primarily because when I was in the Navy I heard many people making references to Secretary McNamara's management style. I decided to try and find out for myself exactly what his impact was. In the course of my research.

I spent a lot of time reading his congressional testimony, and never in my wildest imagination did I think that I would be sitting at the same table with him. [Laughter.]

It is also a great privilege for me to be here again. Senator Domenici, in his opening statement, mentioned that a decade ago the Senate Budget Committee decided to take the lead in raising defense spending. I happened to be one of the witnesses who was called before the Senate Budget committee and I commend him for his leadership in laying the groundwork, along with then Chairman Senator Muskie for increasing defense spending. I also wish to commend him for the courageous way which he presided over the Senate Budget Committee during the buildup.

As I reflect on my testimony of some 10 years ago, I note that I advocated what President Reagan, then candidate Reagan, was advocating, that is a 5-percent real increase in defense spending. Before I came into the administration, when I heard that the increase was going to be much greater, along with former Secretary Laird, I authored a piece called, "We Need a Buildup, Not a Binge," but that is not what happened. As your chart points out, because we increased spending by 10 percent, it laid the foundation, even before Gorbachev, for the erosion of the defense consensus.

As I point out in my prepared testimony, we have never satisfactorily, as a Nation, solved the question of how much to spend on defense. Theoretically, we should spend what we need to meet the

threat, but as a practical matter, as every President in the post-World War II period has noted, our economy is always a constraint.

President Eisenhower put it quite well when he said that a great equation exists, that is, we have to have a combination of military strength as well as economic strength to have national security.

I would also like to point out that, despite what many people think, the legislature has played a very healthy role in these Defense budget debates. As Senator Domenici mentioned, in the Carter administration, it was the legislative branch that took the lead in getting President Carter to increase defense spending to deal with the deteriorating international situation, in the second Reagan administration, it was the Congress that slowed down the proposed buildup to avert economic disaster.

Had the buildup that President Reagan and Secretary Weinberger requested for fiscal years 1986 to 1990 gone forward as they had proposed, we would now be spending more in interest on the national debt than we are on defense.

Throughout the post-World War II period, rarely have the economic and military factors moved together. The one time they did was when Secretary McNamara first came into the Pentagon. In the early 1960's, the Kennedy administration increased defense spending to deal with our military weaknesses and, at the same time, defense as a share of the budget and the GNP went down.

I think right now we are in one of those fortuitous periods where the economic and military situations are moving together. There is no doubt about the fact that the military threat is declining. Even people who are perceived as hard-liners, like my former colleague, Dr. Fred Ikle, Secretary Cheney, and Admiral Crowe have all acknowledged in recent days that the military threat from the Soviet Union is declining.

Senator DOMENICI. Mr. Chairman, I wonder if I could have just minute.

Chairman SASSER. Surely.

Senator DOMENICI. Excuse me, Dr. Korb. Because of a previous engagement, I have to leave. I want you to know that I will read your testimony and the questions carefully, and I appreciate your giving us time. Senator Grassley will be the minority member here. Let me, however, correct one thing. It was not Senator Muskie, it was Senator Hollings. Chairman Muskie had left when we had called you up here for your testimony.

Dr. KORB. Well, he was there that day, Senator. I did not know he had left the chairmanship, but he was——

Senator DOMENICI. Well, Senator Hollings and I made the proposal. Perhaps you were right, but I think it was the Hollings-Domenici proposal.

Dr. KORB. I know there was some very tough questioning of Senator Muskie that day.

Senator DOMENICI. Thank you.

Chairman SASSER. You may proceed, Dr. Korb.

Dr. KORB. As I said this is one of these times where the military and economic factors are moving together. In addition to the fact that the threat is declining, we have just completed, as your chart points out, a war-time modernization of the military, without a war, thus the military is in excellent shape.

I believe that, given what has been happening in the past couple of years, it is prudent to plan on the defense budget going down in real terms by about 5 percent a year over the next 5 years. As has already been pointed out, over the last 5 years, budget authority has declined by about 3 percent a year in real terms.

However much the budget declines, the exact number is not as important as how we spend the money. Too often we get caught up in playing these number games, trying to prove various things by switching from authority to outlays and from shares of GNP to shares of the budget, often we lose sight of the goal which is to provide for national security in a cost effective way.

The first thing that has to happen is for the administration and the Congress to have their own version of a "Malta summit" to agree on where we are going to go. Maybe the summit could be held in a nicer place at Oak Ridge or Santa Fe or in Des Moines. The point is that the executive and legislative branches must get together.

There are three things the administration needs to do and three things that the Congress need to do. The first thing the President and the administration must do is stop blaming Congress for cutting defense spending. Take a look at what President Bush himself has done since taking office; in his first speech on February 9, 1989 in the budget agreement with Congress last spring and in the latest directive to the Pentagon, he himself has cut over $200 billion from the 5-year plan that he inherited.

The second thing the administration needs is put the current budgetary situation into proper perspective. As has been pointed out several times this morning, even if we were to cut the defense budget by 5 percent a year real terms over the next 5 years, in today's dollars we would be down to a level of $225 billion, this is more than we spent, on average, as you pointed out, in the fifties, sixties, and seventies on defense. This is not the Armageddon for the military-industrial complex, as some people seem to be thinking.

Finally, the administration needs to present a coherent strategic vision to the Congress. As I pointed out and Senator Grassley mentioned, the administration has not yet developed that. In all fairness to Secretary Cheney, I think, given his late start and the rapidity with which events are moving, it has been a difficult task for him. I just hope he is able to catch up.

In developing this strategic vision, we must avoid such gimmicks as unitemized subtractions, playing games with inflation, and moving pay days. These gimmicks do not really save any money or impact upon military capability.

The Congress, for its part, should do three things. One, agree on a level of defense spending and stick with it. In my view, whether the reduction is 3, 4 or 5 percent is not as important as having an agreement between the administration and the Congress on the level we are going to sustain over the long haul.

Second, the Congress has to let strategic, not the domestic factors dominate the debate. As I point out in my prepared testimony, I think Chairman Aspin deserves a congressional medal for bravery this year for trying to get Secretary Cheney's budget passed in toto. Of course, as you know, he failed, and because the whole Cheney

plan went up for grabs, the Nation did not get the most out of the 1990 budget.

The Congress is going to have to come to grips with the fact that, as we cut defense spending, less people will be employed in defense industry and there will be less people in the military, there will be less of a defense infrastructure, we cannot just focus on individual areas of the country, or individual industries, while ignoring the national good.

Finally, the Congress has to get away from labeling weapon systems as Democratic and Republican. Too often, as a test of party loyalty, people on the Hill are asked to support weapons systems that were originated by their own parties. I refer to systems like B–2, the Midgetman, MX and B–1. These weapons should be considered on their merits, not their party origins.

How to go about reducing the budget? We need to do it in two stages. First of all—as Secretary McNamara and Senator Domenici have aready pointed out—pending the signing of START and CFE, we should not make major cuts in our force structure. We can, however, delay the next generation of modernization, primarily because we have just completed an extensive one. Thus at no risk to national security we can keep expensive and technologically sophisticated programs like SDI, MX, B–2, Advanced Tactical Aircraft, Advanced Tactical Fighter, AMRAM missile, and Sea Wolf Submarines in research and development, while waiting to see what happens at these arms control negotiations.

If the International situation should determine, we can then go ahead and modernize. But since we do not know what type of world we will have after these arms control negotiations, and since we are already in good shape, it makes little sense, in my view, to rush a whole new generation of weapons systems into production.

While we are slowing down modernization, we can cut the force structure to the pre-Reagan levels. The Army can go back to 16 divisions, and the Navy can return to 12 aircraft carrier battle groups.

Second, if these arms control negotiations are concluded successfully, then we can begin to make major force structure reductions. We can safely reduce the active duty Army and Air Force in half and the active duty Navy by about a third.

While we are doing that, we ought to move, as Secretary McNamara said, from START I to START I and CFE I to CFE II. If events in the Soviet Union and Eastern Europe continue as they have in the last year, by the year 2000 this nation can have a defense budget in real terms that is 50 percent below where we are now. With such a level of expenditures, we can have a nuclear deterrent consisting of 4,000 warheads, approximately 75,000 troops in Europe, a relatively small mobile quick reaction active duty force, and a force with the heavy components necessary for a prolonged intense conventional war.

However, if we do not seize the opportunity and just sort of muddle through, as we have in the past couple of years, this nation will not receive an adequate return on its defense investment.

If I may, because I did not have time to go into it in my testimony, I would like to enter in the record a study I did at Brookings

last spring that talks about how to cut some $200 billion out of the 5-year plan over the next 5 years, which is approximately what Secretary Cheney has been proposing.[1]

Thank you, Mr. Chairman.

[The prepared statement of Dr. Korb follows:]

Statement of Lawrence J. Korb

before the

Senate Budget Committee

December 12, 1989

Throughout the post-World War II period, the American political system repeatedly and unsatisfactorily has grappled with the question of "how much is enough" when trying to decide on the appropriate peacetime level of defense spending. Theoretically, this nation should spend whatever is necessary to provide for the "common defense," i.e. meet the threat. However, there is rarely a consensus within the political system about the nature and extent of the threat. Nor has there ever been enough money within the federal budget to provide for absolute security without crippling the economy. Therefore, in the final analysis, the size of the defense budget has been determined by a combination of the threat facing the country and the state of our economy.

Some presidents, like Truman, Eisenhower, Nixon and Ford, put more emphasis on the economic factor, while others, like Kennedy and Reagan, focused more on the threat. However, no post-World War II administration has ignored totally either the economic or military factor. Moreover, when a particular president has not put the proper emphasis on either of these factors, the Congress, prodded by the American people, usually has pushed the administration back to reality. For example, in 1978 the Congress, alarmed by President Carter's seeming lack of concern about the deteriorating military balance, pushed him to increase defense spending substantially in his last two years in office. Similarly, in 1985, it was largely the legislative branch concerned by the huge deficits piled up in Reagan's first term, that forced President Reagan to scale back the defense expansion which he planned in his second term. Had Reagan's plan been enacted, interest on the national debt would now be over $300 billion.

Rarely have the economic and military factors moved together. Prior to now there has been only one occasion in which these two factors have been correlated: the Kennedy Administration. During that time, Secretary McNamara was able to increase defense spending in real terms for three consecutive years to shore up the weaknesses in our military establishment while the growth in our economy reduced defense's share of the GNP and the federal budget.

At the present time, we have another one of these fortuitous circumstances. The size of our budget and national deficit and the unwillingness of the American people to increase taxes means that defense spending will continue to decline in real terms as it has since 1985. Fortunately the military threat from our principal adversary, the Soviet Union, is also declining. In recent weeks even such staunch advocates of increasing defense spending as Admiral Crowe, former Chairman of the JCS; Fred Ikle, Undersecretary of Policy in the Reagan Administration; and Secretary of Defense Dick Cheney have spoken publicly about the reduced military threat from the Soviet Union. Whatever else the events in Eastern Europe may mean, they have increased the time our forces would have for mobilization. Moreover, the proposals already agreed to by both the United States and the Soviet Union at the START and CFE talks will codify this reduced threat. Finally, since the armed forces just completed an unprecedented modernization of their force structures, they are presently in better shape than at any time in the post-World War II period.

The American people and President Bush have recognized this new reality. Opinion polls show that even after five years of decline, only 10 percent of the American people support an increase in the size

of the defense budget, the lowest level of support for the defense budget since 1971. In less than one year, President Bush has already taken action on his own to reduce the five year plan he inherited by $230 billion or 15 percent.

There is no doubt that the combination of Gramm-Rudman-Gorbachev can and should drive the level of defense spending down by about 25 percent in real terms over the next five years. In January 1990, Dick Cheney will become the first peacetime Secretary of Defense since Robert McNamara in 1964, to propose a defense budget that shows a real decline. If the administration and Congress manage the build-down correctly, the U.S. can be more secure at lower levels of defense spending than we are now. In addition, by 1994 this nation can achieve a balanced budget. Such a development can have a dramatic impact on our economic well-being and our competitive position in the world.

To manage the build-down successfully, the Bush Administration must take three steps. First, it must acknowledge that because of military and fiscal realities, the President and his national security advisers are out front in proposing the reductions. To date, the President and his people often try to have it both ways by pretending that it is that "liberal, soft on defense" Congress that is forcing them to cut back projected levels of defense spending. Over the past year, Congressional "pressure" has forced Bush to reduce spending by exactly $5 billion. The president himself has made over $200 billion in reductions.

Second, the administration needs to put the proposed build-down into the proper perspective. If the defense budget is reduced by 25 percent over the next five years, it will drop to $225 billion in FY 1990 dollars. In constant dollars this will bring us back to where

we were in 1980 and will be higher than the peacetime averages of the 1950's, 1960's, and 1970's. This is hardly enough to justify the wild reductions being leaked from the Pentagon. If we are spending $225 billion in 1994 on defense, the result will not be unilateral disarmament or the end of the military industrial complex.

Third, the administration needs to develop a coherent strategic vision and complementary force structure to guide us into the 21st century. To date, the administration has failed miserably at this task. As Aviation Week and Space Technology (November 27, 1989, p. 7) has noted, "President Bush's strategic review was a nullity and those responsible for that failure also failed to produce the Defense Planning Guidance on October 1." Thus, Secretary Cheney asked the services to cut $180 billion from the FY 1992-94 defense program in 72 hours without a clear sense of priorities. (In fairness to Secretary Cheney, his late start in office has made it difficult if not impossible for him to get on top of things.) DOD can no longer rely on such gimmicks as unitemized subtractions, unrealistic inflation estimates, and program deferrals to bring its program and budget into line.

For its part, the Congress must also take three steps. First, the legislature needs to come to an agreement with the executive branch on the level of the expenditures for the FY 1991-95 period. Whether that level is three, four, or five percent reductions is less important than adopting a level and staying with it for the long haul.

Second, the Congress must resist the temptation to let domestic political concerns override strategic considerations. Congressman Les Aspin (D-WI) Chairman of the HASC, deserves the "Congressional award for bravery" for his willingness to risk his chairmanship to save

Cheney's FY 1990 budget. If the administration develops a coherent defense program for FY 1991-94, more Aspin-like bravery will be needed because real reductions of 25 percent must mean reductions in defense employment and the defense infrastructure. Providing almost $2.0 billion for planes and helicopters, not needed by DOD, as the Congress did in its deliberations on the FY 1990 budget, may save some jobs in some states in the short term but will hurt us all in the long run. Rather than buying weapons DOD does not need, the administration should work with the Congress to provide economic assistance to those individuals and industries severely impacted by the drop in defense spending.

Third, the leadership of both parties needs to move away from labeling particular weapons systems Democratic or Republican and asking members to support the systems as a test of party loyalty. Too often Democrats are asked to support the B-2 and Midgetman because these systems were originated by members of the Democratic party, while Republicans are supposed to vote for the B-1 and MX for the same reasons. These four systems need to be considered on their merits not on their origins.

Given the current military and economic situation, the defense program should be reduced in two stages. First, pending the outcome of the START and CFE talks, the rush toward modernization of our strategic and conventional forces should be slowed down. Because the armed forces have just completed an unprecedented peacetime modernization program and because there will not be a need for as many weapons in the post-START and CFE worlds, there is no pressing need to rush the next generation of weapons into production. Expensive systems, weapons like the B-2, SDI, Midgetman, SDI, ATF, ATA, AMRAAM, LHX, and Seawolf can be

kept in R&D pending the outcome of the arms control negotiations. Similarly, during this first stage, the size of our conventional force structure can be safely reduced to its pre-Reagan levels. This would mean a 12-Carrier Navy, 16-Division Army, and a 34-Tactical Air Wing Air Force.

Second, after, and only after, the CFE negotiations are completed successfully, large reductions in the conventional force structure can be made. The number of active duty army divisions should be cut to 8, active Air Force Tactical Air Wings to 12, and the Navy to 9-Carrier Task Forces. If the international situation deteriorates and prevents us from concluding these agreements, the decline in the defense budget should be halted and our existing force structure modernized.

When the first round of negotiations are completed, the US and USSR should move quickly to START II and CFE II. Successful completion of these negotiations should leave us by the end of the decade with a strategic force of 4,000 warheads, about 75,000 troops in Europe, and a defense budget of about half the size of the present one. The DOD of the 21st century should be composed of comparatively small, mobile, active duty forces backed up by well equipped heavier reserve forces. Our active forces should be maintained in a high state of readiness and our research efforts should focus on those advanced technologies in which we have a competitive advantage. Such a posture and budget will indeed make us more secure at less cost.

Chairman SASSER. I want to thank you for calling attention in I thought a very receptive column you had in The Washington Post not too long ago, in which you admonished the Department of Defense not to play the numbers game that we have seen played so skillfully over the past decade.

You are indicating, if I understand your testimony correctly, that we can cut the defense budget by 1994 by 25 percent, which would be reducing it down to $225 billion by 1994.

Dr. KORB. That is correct.

Chairman SASSER. And that would, in effect, reduce the Air Force by 50 percent, reduce the Navy by one-third. Now, even if we cut it down to that level of $225 billion, that would be commensurate with our peacetime expenditures since the Second World War, excluding the Korean war and Vietnam, in accordance with that chart we have that. Is that not accurate?

Dr. KORB. That is correct. It would return us to the levels of the early 1980's, which certainly was not a period of unilateral disarmament. My point is that $225 billion is sufficient to spend on defense, if in fact you do it correctly and it is guided by a constant strategic vision. If we have a repeat of the fiscal 1990 budget debate, in which the Secretary of Defense presented a plan not backed by a coherent vision which allowed Congress, to make wholesale changes, we will not receive the most out of the defense budget.

Chairman SASSER. Now, let us discuss just for a moment the proposal that has been put forward by Secretary Cheney. This is a proposal to cut $180 billion between 1991 and 1995, if memory serves me correctly. But, Dr. Korb, this is not an actual cut, in the sense that we are cutting off the Cheney 5-year defense plan, isn't that correct?

Dr. KORB. That is correct. Too often we get involved in these number games, as you note Secretary Cheney is proposing, a cut in the proposed level of increases that he had presented to Congress last spring, thus, it is a $180 billion cut from where you thought you were going to be. It is not a $180 billion reduction from where you actually are right now.

Chairman SASSER. Right. In other words, under the 5-year Cheney plan, with the so-called cut of $180 billion, you still have between 1990 and 1994, a $212 billion nominal growth in the defense budget. Then, when you subtract the $180 billion from the Cheney proposal, you still at the end of the day have a $20 billion growth in nominal terms in defense outlays.

Dr. KORB. Yes, you will have a growth, in nominal terms however, the Defense Department will lose significant amounts of buying power, because we do know that inflation in defense will be 3, 4, maybe 5 percent over this particular period.

Chairman SASSER. How can we be sure of that? Why would not inflation rates—could inflation rates decline even below the 5, 4, 3 percent figure over the next 5 years?

Dr. KORB. Well, obviously they could. It is worth noting that in the current 5-year plan, that was put forward by the Bush administration last spring, they assumed only 2 percent inflation rates. If the rates are higher than that, the Defense Department will have a gap between their program and budget. We do not know what the

inflation rates will be. We have some historical data, but we do know that in the past people have played games with those inflation rates.

Chairman SASSER. Yes, we do.

Dr. KORB. I can remember former Senator Barry Goldwater getting furious at my former boss Secretary Weinberger, 1 year when DOD was asked by the Senate to make some reductions in defense spending and the Secretary just reestimated the inflation rates, and so in fact we did not change any programs.

Chairman SASSER. Dr. Korb, in the past 40-plus years, I think the primary thrust of U.S. national security strategy has been to rebuff a Soviet thrust through Western Europe. We have stationed 300,000 troops there, supported by over 300,000 civilian employees and dependents over a period now of almost half a century. We allocate about $150 billion to maintaining these troops, civilians, dependents, and supplying them with the proper weapons, et cetera, to protect Western Europe.

Now, if one assumes that the threat is already greatly diminished or will eventually diminish, in other words, as indicated a moment ago to Secretary McNamara, that what we have seen in the past few weeks is the Soviet order of battle being depleted by about 50 divisions and, even more than that, the Soviets would now have to defend their lines of communication, most would agree, through Eastern Europe.

If we see this threat so greatly diminished, what priorities should we emphasize with our remaining defense dollars, as we move toward smaller defense budgets?

Dr. KORB. What you want to have with your nuclear forces, is minimum deterrence, that is enough to prevent the Soviet Union or any other power from even thinking about using strategic nuclear forces against us. I hope that if we can go from START I to START II, we can eventually get the British, the French, and the Chinese involved in nuclear arms reduction talks.

With your active forces, you need to emphasize forces that are lighter and more mobile, because the chances are that you will be involved in areas like the Persian Gulf, rather than in Europe. In your reserve forces you need the capability for a long, extended, heavier war.

What the events in Eastern Europe have done, if nothing else so far, is given us much more mobilization time. We now know, based upon documents that have recently been declassified for us by The Washington Post, that we had more warning time than people were admitting, even when I was in the Pentagon. Given the reorganization of Eastern Europe there would be no way in which we would not have at least 3 or 4 months of warning time to prepare for a war in Europe. This extra time would allow us to bring the reserves back on active duty and to get them into position to deal with the situation.

Chairman SASSER. It has been suggested by at least one scholar that, as we move in the direction of reducing the size of our army, that is, as we scale down our present 18 divisions to 16 or 14 or 12, or ultimately whatever size the army ultimately becomes, that we maintain in Europe a force of three or three and a half divisions in Germany. What is your reaction to that?

Dr. KORB. I think that is far too many. I would say that by the year 2000 we ought to have in Europe between 50,000 and 75,000 American troops, without their dependents. The forces ought to go over there for a couple of months and then come back. I think it is in our interest, it is in the Europeans' interests, and even in the Soviet interest to have an American presence there. Three and two-thirds Army divisions on the ground is not appreciably less than we have now. I do not think it has to be that number, if we have CFE I and CFE II.

Chairman SASSER. Right.

Senator Grassley?

Senator GRASSLEY. Have you given any thought, in accomplishing the reduction that you propose over the next several years, what percentage of that might come as a result of unilateral decisions on our own, as opposed to decisions that I think will be made in conjunction with NATO, on the one hand, and at the bargaining table with the Soviets on the other hand, vis-a-vis Europe?

Dr. KORB. Yes; I have, Senator. I think on our own, before we conclude these arms reduction talks with the Soviets, we can slow down the next generation of modernization. I see no real need, after having gone through a wartime modernization without a war in the 1980's, as the budget went up, for us to rush head-long into modernizing every strategic and tactical part of our armed forces. Moreover we can return the active duty force structure to the levels that prevailed in the late seventies and early eighties. The Army does not need 18 divisions, it can comfortably go back to 16 divisions.

We were never able to afford a 600-ship Navy, and over the last 2 years the Navy has successfully dropped its goal to 580 and 560 ships. We ought to get it back to 12 carrier battle groups and 500 ships. We can also return to 32 tactical air wings. This can be done safely even before we sign these arms control agreements.

If we are successful in concluding these agreements, then I think we can really reduce the size of our force structure significantly. By the year 2000, if events keep going as they have, we will need no more than about 8 active Army divisions, as opposed to the 18 now; we can have an Air Force of 12 active tactical air wings and 12 reserve, and a Navy of 9 carrier battle groups and about 400 ships.

Senator GRASSLEY. Then, would it be possible for you to put a percentage on that that you say we can do unilaterally on our own, as opposed to consultation with NATO?

Dr. KORB. I would say we can cut about 25 percent on our own over the next 5 years.

Senator GRASSLEY. Thank you, Mr. Chairman. Those are all the questions I have.

Chairman SASSER. Dr. Korb, according to the services, there is a shift from a 2-percent real growth to 2 percent nominal growth, which really amounts to about a 2-percent real reduction, over the period 1991 to 1994, would mean reduce military personnel by 250,000, eliminating 3 active Army divisions, eliminating 5 Air Force fighter wings, eliminating 62 ships from the Navy by 1994.

Now, there are some analysts who question whether the Pentagon models accurately capture all of the savings that a crew from

these four structure changes, and that in fact less drastic alterations may be needed to meet the targets that Secretary Cheney is advancing. What is your thought on that?

Dr. KORB. One thing we need to get away from—and I know it is very difficult for this committee, because of its jurisdiction—is worrying too much about outlays. If you worry about budget authority, eventually your outlay reductions will come. If you focus only on outlay, then you are going to force DoD to make more reductions in force structure than it would if it could focus on authority.

It seems to me that this is not a 1-year problem. Even though I understand the pressures that this committee and the Congress are under the meet the Gramm-Rudman-Hollings targets in FY 1991. But if, in fact, we play an outlay game, we end up saving money in the short term by such gimmicks as moving military pay days around. The outlay game also builds up a greater problem for DoD in the future.

This problem should be viewed on a 4 or 5 years basis. If it is, we can make those reductions in a way that does not endanger either our negotiating position or our national security policy. As I point out in my prepared testimony, we must put ourselves into a position that, if the world changes—and we know historically that it has changed lots of times—that we are not so far behind that we can never catch up.

The prudent course now is not to make massive force structure reductions. I do not see any need, even given the budget reductions that I forsee, which is a 5 percent real reduction, that you have to make massive cuts in your force structure.

The prudent course is to delay the next generation of modernization, for two reasons. Number one, you just had a wartime buildup without a war. You have not used up all of that equipment. The other reason is we do not know the shape of the post-1995 world. I mean, who would have imagined a year ago that events in Eastern Europe have unfolded as they have.

If you move from development to production of a weapons system, there is no turning back. Moving these expensive new systems into production will soak up so much of your investment budget, that you may have to sacrifice the development of some new technologies. We are on the threshold of a whole new generation of modernization of new fighters and new bombers. Once you move into production on these systems, it becomes very difficult to pull back and adjust, thus given the modernization that you have had in the 1980's let us slow down the next wave, let us keep these systems in R&D.

It is important that we protect our technology base and evolve a technology policy that protects our ability to surge, we should also hold back on massive force structure reductions now, because once you make them, these forces are gone forever. There is a myth that somehow high quality people are easy to procure. We have taken 10 years to build up the current high-quality armed force. It is the highest quality force we ever had. I just would not want to reduce that force quickly, because I know how it will be done.

If major force structure reductions are made in a hurry, you will throw out all the good young people, because of the retirement system.

What the administration and the Congress need to figure out is where we want to be in 1995, then let us begin to move there now without being overly concerned with the year to year outlay numbers. As you know the Congress met the Gramm-Rudman targets year by moving a fiscal year 1990 military pay date back to fiscal 1989.

Chairman SASSER. Congress did not do that, the administration did that.

Dr. KORB. All right. Well, whatever, but that did not save any money, that is not the way to do it.

Chairman SASSER. Yes; you know, we strenuously opposed that, but the administration went ahead and did it anyway. Of course, as you know, our fixation on outlays is driven by the Gramm-Rudman-Hollings Act and, hopefully, we can structure that or modify it some way this coming year so that we will not be driven by outlays and can take a longer-range approach and think in terms of budget authority.

Now, Dr. Korb, we historically have renewed our so-called weapons platforms, et cetera, about every 20 years, is that not correct?

Dr. KORB. That is correct.

Chairman SASSER. And the platforms that we are presently operating from are relatively current, and so what you are urging upon this committee, and I assume upon the administration, if they will listen to you, is we simply defer renewing or moving forward with new platforms, keep what we have got and keep the force structure in place, rather than a wholesale reduction of that.

Now, the question comes, the Soviets have begun to reduce. Gorbachev has indicated that he is going to reduce his forces by 14 percent by 1991, and our intelligence people are telling us that the evidence is there that those reductions are now moving forward apace. Now, how long can we expect the Soviets to continue to reduce, if we do not have commensurate force reductions ourselves? I am not talking about proportional force reductions, but what I am talking about is some force reduction on here, so that Mr. Gorbachev can turn to his hardliners and say, "See, I told you, they are reducing also"?

Dr. KORB. Well, let me say two things. I think we ought to return to the pre-Reagan force structure levels. I think we can do that very prudently. As Secretary McNamara mentioned, we can go back to 12 aircraft carriers and to 16 active Army divisions without jeopardizing national security.

Chairman SASSER. How much in 1990 dollars would cost us to maintain and keep in being the pre-1980 force levels, roughly?

Dr. KORB. If you kept it and you slowed down the next generation of modernization, I think you could do it in 1990 for about $225 billion. I should note that what the Soviets fear most of all from us is our technology, and I think we need to protect our technology base. However if we do not move these weapons into production, I think then Mr. Gorbachev will be able to deal with his so called hardliners.

If we move into a whole new generation of weapons systems, like advanced tactical fighters, advanced tactical aircraft, advance technology bombers, air SEAWOLF submarines, the Soviets will be

more concerned than if we have 13, 14, 15 or 10 active army divisions.

Chairman SASSER. A good point.

Senator Grassley?

Senator GRASSLEY. Thank you, Dr. Korb, for being here.

Chairman SASSER. One final question, Dr. Korb. If we can reduce our spending in 1990 dollars from $300 billion to $225 billion in 1994, that is a savings of $75 billion per year, we can reduce it to what by the year 2000?

Dr. KORB. Well, if we reduce it 5 percent a year in real terms over the next decade, then we have basically cut it in half over the next 10 years.

Chairman SASSER. So, we are talking about defense outlays in constant dollars of $150 billion by the year 2000.

Dr. KORB. In other words, the budget for the year 2000 in today's dollars would be roughly $150 billion. If you take it in 5 percent increments and you do it the way I have suggested, you have the ability to reverse course if events dictate because you will have kept your force structure in place. But certainly by 1995, we will have a pretty good idea of the shape of the world and to see if we can then make the next 25 percent.

Chairman SASSER. Dr. Korb, I have no further questions. I thank you very much for appearing here before us and giving the committee the benefit of your views. They have been very, very helpful.

Dr. KORB. Thank you very much, Mr. Chairman.

Thank you, Senator Grassley. It has always been a pleasure to work with you and Senator Sasser.

Senator GRASSLEY. Thank you.

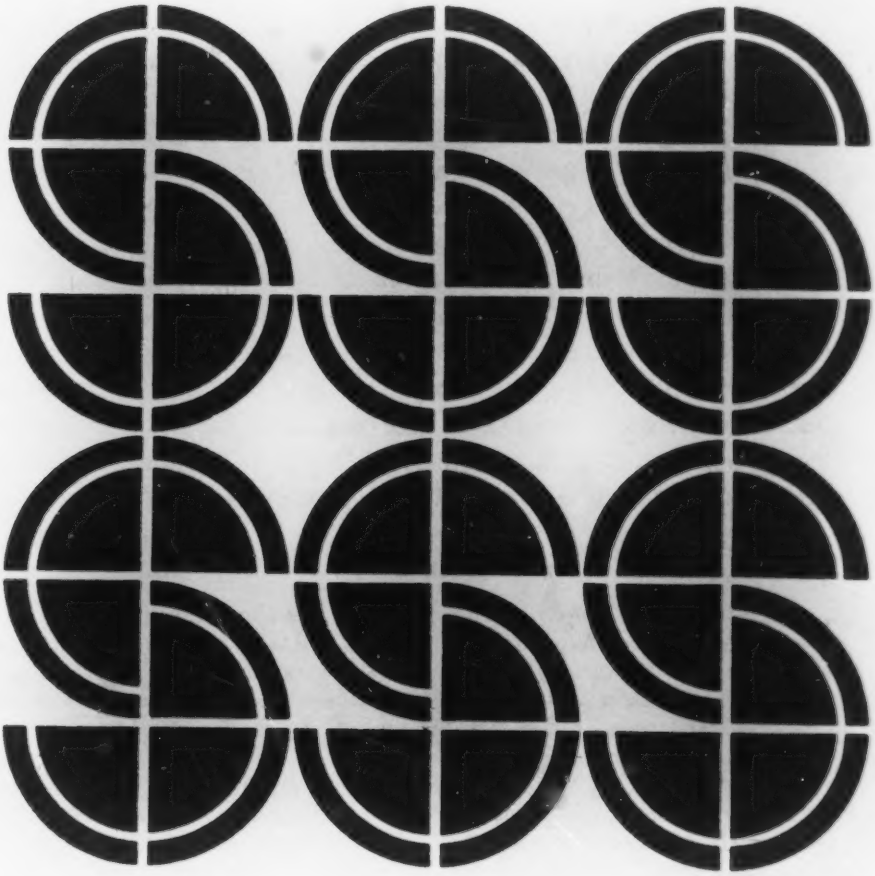
Chairman SASSER. The committee is adjourned.

[Whereupon, at 12:29 p.m., the committee was adjourned.]

The 1990 Defense Budget

Studies in Defense Policy

William W. Kaufmann
Lawrence J. Korb



THE 1990 DEFENSE BUDGET

GEORGE SANTAYANA once observed that the "working of great institutions is mainly the result of a vast mass of routine, petty malice, self interest, carelessness, and sheer mistake. Only a residual fraction is thought." Whether or not they were aware of this gloomy pronouncement, presidents from Eisenhower to Carter believed that at the outset of their administrations they should demand some systematic analysis from the Department of Defense about its goals, programs, and budgets. President Bush has wisely decided that his administration too should undertake a review.

Such a comprehensive review is badly needed: as W. Somerset Maugham once noted, the "unfortunate thing about this world is that good habits are so much easier to give up than bad ones." Since 1977 no group within the Defense Department has seriously and systematically examined the assumptions either of its political predecessors or of its own policymakers.[1] As a consequence, President Bush faces not only a complex and disturbing legacy from the Reagan administration but also a number of difficult decisions. Indeed, it is impossible to separate the nature of his choices

1. Ironically, in the last year of the Reagan administration, the secretary of defense and the assistant to the president for national security affairs established a commission on integrated long-term strategy. Cochaired by the undersecretary of defense for policy, Fred C. Iklé, and by Albert Wohlstetter, the commission produced *Discriminate Deterrence*, a report that attempted to relate programs to future budgets. The study urged the department to deemphasize forces that would be used primarily in a large-scale conventional war in Europe or an all-out nuclear exchange. Instead Iklé and Wohlstetter assigned budgetary priority to those forces that could be employed in low-intensity conflict and limited nuclear contingencies. Within this focus, the study argued that precision guidance weapons munitions (smart weapons) should take priority over new weapons platforms and that weapons modernization be pursued at the expense of readiness. Finally, the report noted the growing importance of the Pacific rim as an area of strategic importance to the United States. Even more ironically, Iklé resigned shortly after completing the report and no action was taken on it. See Commission on Integrated Long-Term Strategy, *Discriminate Deterrence* (January 1988).

from an appreciation of the Reagan legacy and the context in which these choices must now be made.

The Reagan Legacy

Harold Macmillan, former prime minister of the United Kingdom, has commented, "I have never found in a long experience of politics that criticism is ever inhibited by ignorance." Certainly as he entered office in 1981 Ronald Reagan brought with him misconceptions that had formed an integral part of the Republican platform in 1980. He was convinced that he was inheriting a decade of neglect in defense, even though budget authority for fiscal 1981 was already greater than it had been in fiscal 1964, the last pre-Vietnam budget year.[2] Indeed, despite inflation, defense budget authority had increased in real terms in fiscal 1980 and 1981. In addition, presidents Nixon, Ford, and Carter had already inaugurated substantial programs for modernizing nuclear and conventional forces.[3]

Reagan expressed special concern about what was known as the window of vulnerability—a vulnerability based on the supposition that U.S. intercontinental ballistic missiles were the heart of the strategic nuclear deterrent and could be destroyed in a Soviet first strike—despite analyses showing that even after a first strike, residual U.S. forces should be able to deliver more than 3,000 warheads to a wide range of targets in the Soviet Union.[4] Reagan and his key advisers had also been persuaded on quite tenuous grounds that the United States was losing its naval superiority to the Soviet Union and could restore it only by building a 600-ship fleet dominated by 15 carrier battle groups, 4 surface action groups with battleships at their center, 100 modern nuclear attack submarines, and an expanded amphibious assault force.[5]

In addition, Reagan held two other views that were to influence strongly his defense legacy. He and his advisers were convinced that the Soviet Union was outspending the United States in defense by as much as 50 percent and that the Soviet advantage in investment in new weapons was

2. Office of the Assistant Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 1988–1989* (May 1987), table 6-9.

3. Melvin R. Laird, "A Strong Start in a Difficult Decade: Defense Policy in the Nixon-Ford Years," *International Security*, vol. 10 (Fall 1985), pp. 5–26.

4. William W. Kaufmann, *A Reasonable Defense* (Brookings, 1986), table 5-9.

5. *Department of Defense Annual Report, Fiscal Year 1983*, pp. II-14–II-15, III-19–III-36.

even greater. They also believed, as had (briefly) others before them, that many of these weaknesses had come from centralized planning and programming decisions in the Office of the Secretary of Defense and that the remedy was to limit the powers of OSD and give greater latitude to the Army, the Navy, the Marine Corps, and the Air Force within what would be generous budgets.[6]

Fiscal 1981–85

Based on these somewhat sketchy views of what needed to be done to restore U.S. defenses, President Reagan, with considerable support from Congress, began an unprecedented peacetime expansion of the defense budget. Overall budget authority for defense increased from fiscal 1980 to 1985 in real terms by nearly 53 percent (table 1). More remarkably, investment (which includes procurement, research, development, testing, and evaluation and military construction) grew in real terms by more than 100 percent, and procurement alone by 112 percent. This meant that during these five years U.S. budget authority was expanding at a real rate of more than 10 percent a year and defense outlays (as differentiated from budget authority) by more than 6 percent a year, while Soviet spending was increasing by no more than 2 percent a year (as estimated by the Central Intelligence Agency), and its investment outlays were not growing in real terms at all.[7]

Several other features of these Reagan budgets are worth noting. The budgets were front-end loaded in favor of investment, especially procurement. This meant that because of the long lead times associated with the expansion of production lines and the actual production of missiles, aircraft, ships, and tracked vehicles, the growth in spending would lag behind the growth in budget authority (which allows a department to sign contracts and ensures that the necessary funds will be available when bills come due). It also meant that other important accounts, such as military personnel and operation and maintenance, would not have to increase at comparable rates until some years in the future. As it was, the budget for

6. *Department of Defense Annual Report, Fiscal Year 1983*, pp. II-4–II-6; and Vincent Puritano and Lawrence Korb, "Streamlining PPBS to Better Manage National Defense," *Public Administration Review*, vol. 41 (September-October 1981), pp. 569–74. The Republican platform of 1980 went so far as to call for the abolition of the Office of Systems Analysis.

7. William W. Kaufmann, "A Defense Agenda for Fiscal Years 1990–1994," in John D. Steinbruner, ed., *Restructuring American Foreign Policy* (Brookings, 1989), p. 57.

Table 1. Department of Defense Budget Authority, by Appropriation Title, Fiscal Years 1980–85
Billions of fiscal 1988 dollars unless otherwise specified

Title	*1980*	*1981*	*1982*	*1983*	*1984*	*1985*	*Percent real change 1980–85*
Authority							
Military personnel	68.1	69.8	71.8	73.4	74.9	75.3	10.6
Operation and maintenance	62.6	68.0	72.3	75.5	79.4	84.4	34.8
Procurement	50.3	63.1	79.5	94.5	97.9	106.7	111.9
Research, development, test, and evaluation	19.1	21.5	24.6	26.9	30.6	34.5	81.0
Military construction	3.1	4.4	6.0	5.3	5.2	6.1	95.5
Family housing	2.1	2.5	2.6	3.1	3.0	3.2	51.4
Other[a]	0.9	2.7	2.2	0.8	2.4	5.1	[b]
Total	206.2	232.0	259.0	279.5	293.4	315.3	52.9
Outlays	199.8	209.0	224.0	240.9	250.7	269.3	34.7

Source: Office of the Assistant Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 1988/1989*, pp. 94, 103.
a. Special foreign currency program, revolving and management funds, and trust funds, receipts, and accruals.
b. Year-to-year variations make percentage change meaningless.

military personnel, on the average, grew in real terms by only 2 percent a year, an increase that nonetheless permitted better pay, more recruits and ones of much higher quality, and improved reenlistment rates. Operation and maintenance did even better, averaging a 6.2 percent annual real increase that permitted improvements in living conditions, more training, somewhat greater readiness in a slightly larger force, and growth in war reserve stocks.[8] As more new equipment came into the inventory, the assumption was that both accounts would expand much more rapidly.

Fiscal 1986–89

Unfortunately, both this certainty of rapid expansion and several other assumptions about the defense budget proved wrong. By 1985 public and congressional concerns about the related problems of the trade and federal budget deficits and about waste and mismanagement of the defense buildup had manifested themselves, new leadership had appeared in the Soviet Union, and the defense budget had become a target not for real growth but for real decreases. Over the next four years, defense budget authority fell overall by nearly 11 percent in real terms, and while outlays continued

8. *National Defense Budget Estimates for FY1988–1989*, table 6-8.

to rise through fiscal 1987, they retreated nearly 4 percent by fiscal 1989 (table 2). Indeed, it would now appear that fiscal 1985 was the height of the latest defense boom.

Despite these trends, Secretary of Defense Caspar W. Weinberger continued to fight until his resignation in November 1987 for substantial real increases in the defense budget. He considered additional growth necessary not only for the continued modernization of forces with the current generation of weapons, but also for the early introduction of yet another generation with even more sophisticated and costly capabilities. The five-year defense program he introduced for fiscal 1986–90 probably reflected the true costs of this policy; it required an average annual real increase in budget authority of 6.6 percent and would have expanded defense authority in fiscal 1990 to almost $480 billion (table 3). In 1987, after Congress had rejected this ambitious plan, Weinberger recommended a new five-year plan for fiscal 1987–91 that projected an average real growth of just above 3 percent a year. After the stock market crash of 1987 and Weinberger's departure from office, President Reagan and Congress agreed on budgets for fiscal 1988 and 1989 that attempted to keep defense at its fiscal 1987 level in real terms.[9]

During this four-year struggle the procurement account incurred the greatest percentage reduction of any defense budget item, largely because a few minor programs were canceled, acquisitions were stretched out, and other procurement, the category that includes spare parts, support equipment, and ammunition, was cut. However, funding for research, development, testing, and evaluation, where the next generation of weapons was coming to maturity, increased 5.1 percent in real terms (table 2). Meanwhile, funding for military personnel rose by 2.4 percent in real terms and operation and maintenance actually declined by 2 percent.

Into the 1990s

It would be difficult to say that a coherent program has emerged from the trials of the past four years. Consequently the Bush administration will have to face a number of unpalatable facts as it prepares its own five-year program for fiscal 1990–94 and tries to put the defense house in order. Not the least of these facts is that owing to the emphasis on investment in the Reagan budgets and the lag between the appropriation of

9. *Department of Defense Annual Report, Fiscal Year 1989*, pp. 124–25.

Table 2. Department of Defense Budget Authority, by Appropriation Title, Fiscal Years 1985–89
Billions of fiscal 1990 dollars unless otherwise specified

Title	*1985*	*1986*	*1987*	*1988*	*1989*	*Percent real change 1985–89*
Authority						
Military personnel	78.1	75.4[a]	80.4	80.2	80.0	2.4
Operation and maintenance	91.1	86.7	89.2	88.6	89.3	−1.9
Procurement	113.6	105.2	88.3	85.1	81.5	−28.3
Research, development, test, and evaluation	36.9	38.5	39.6	39.1	38.8	5.1
Military construction	6.5	6.1	5.6	5.7	5.9	−9.2
Family housing	3.4	3.2	3.4	3.4	3.4	0
Other[b]	6.1	5.9	2.7	0.9	0.4	[c]
Total	335.7	321.0	309.2	303.0	299.3	−10.8
Outlays	286.1	302.8	304.3	297.3	293.9	2.7

Sources: *Department of Defense Annual Report, Fiscal Year 1990*, pp. 83, 89, 219; and William W. Kaufmann, "A Defense Agenda for Fiscal Years 1990–1994," in John D. Steinbruner, ed., *Restructuring American Foreign Policy* (Brookings, 1988), p. 57.

a. Lower budget authority in fiscal 1986 resulted from congressional direction to finance $4.5 billion for military pay raises and retirement accrual costs from unobligated balances of budget authority from prior years.

b. Special foreign currency program, revolving and management funds, and trust funds, receipts, and accruals.

c. Year-to-year variations make percentage meaningless.

budget authority and its actual spending, large balances of budget authority remain from prior years and will have an impact on future defense spending regardless of what new budget authority may be appropriated (table 4). Thus if the level of defense spending is to help reduce the federal deficit and these prior-year balances are left untouched, control of future outlays will depend heavily on how much of what kinds of new budget authority is appropriated. A strategy that strongly emphasizes long-term investments at the expense of current operations and support will reduce near-term expenditures but ensure much higher longer-term costs. A preference for maintaining current readiness and sustainability, combined with a more modest program of investments will mean fewer savings in the first several years of a five-year program but a rapid increase in savings thereafter. In theory, it is also possible to cancel contracts and rescind prior-year authority. However, P.L. 99-177, the Gramm-Rudman-Hollings deficit reduction law, bans any congressional rescission of obligated authority, and the Defense Department has been notoriously reluctant to cancel contracts on its own, particularly because of the penalties associated with such action.[10]

10. Kaufmann, "Defense Agenda," pp. 49–51.

Table 3. Five-Year Defense Plans, Fiscal Years 1986–90, 1987–91, 1988–92
Billions of current dollars unless otherwise specified

Period	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*Percent average estimated annual real growth*
Budget authority								
1986–90	313.7	354.0	401.6	438.8	477.7	. . .	. . .	6.6
1987–91	. . .	311.6	332.4	353.5	374.7	395.5	. . .	3.1
1988–92	. . .	. . .	303.3	323.3	343.9	364.9	386.5	3.0
Outlays								
1986–90	277.5	312.3	348.6	382.3	418.3	. . .	. . .	6.8
1987–91	. . .	274.3	290.7	313.3	335.5	356.6	. . .	3.3
1988–92	. . .	. . .	289.3	303.7	321.0	340.0	361.0	2.1

Sources: *Department of Defense Annual Report, Fiscal Year 1986*, pp. 71, 78, 239; *Budget of the United States Government, Fiscal Year 1987*, pp. 6e-12, 6e-18; *Department of Defense Annual Report, Fiscal Year 1987*, pp. 101, 313; *Department of Defense Annual Report, Fiscal Year 1988*, pp. 86, 98, 327; and *Budget of the United States Government, Fiscal Year 1988*, pp. 5-12, 5-15.

Another stark possibility is that unless severe constraints are placed on the investment accounts, continuing to buy the current generation of weapons and acquiring the next generation of systems now under development could cost $1 trillion (table 5). On top of that amount, if the past is any precedent, operating and support funds would have to increase proportionately if the armed forces are to maintain an acceptable level of readiness and sustainability. It is little wonder then that in the circumstances Secretary Weinberger foresaw the need for average real increases in budget authority of 7 percent a year and a fiscal 1986-90 defense program of $2 trillion.

On the other side of the ledger, Congress has been cutting defense budget authority by an average of 2.8 percent a year in real terms for the past four years and for fiscal 1986–90 has authorized only $1.5 trillion.[11] Exactly what its targets will be for the next five years is not yet certain, but the best that the Defense Department can probably hope for is a real freeze, a budget that will grow only by the amount of inflation. Equally possible is that Congress will adopt a recommendation of the Democratic Study Group and impose limits approximating a nominal freeze, which would mean that budget authority (or expenditures) would remain at the current level and would actually decline by the rate of inflation, estimated by the Pentagon (on the optimistic side) as averaging 2.5 percent a year between 1990 and 1994.[12]

11. *Department of Defense Annual Report, Fiscal Year 1989*, table 1.

12. The Report of the Democratic Study Group is summarized in *Inside the Pentagon*, December 16, 1988, p. 5. For the estimate of inflation see *Department of Defense Annual Report, Fiscal Year 1990*, pp. 89, 219.

Table 4. Balances of Budget Authority for Defense and Energy from Prior Years, Fiscal Years 1988–90
Billions of current dollars

	Start 1988	*End 1988*	*End 1989*	*End 1990*
Defense				
Obligated	212.5	216.9	218.4	227.7
Unobligated	47.6	42.3	41.2	43.6
Energy				
Obligated	7.2	6.9	7.8	8.1
Unobligated	2.0	1.8	1.1	1.4
Total	269.3	267.9	268.5	280.8

Source: *Budget of the United States Government, Fiscal Year 1990*, p. 10-18.

The import of these facts and probabilities is unlikely to escape the attention of the planners in the Bush administration: barring an act of God or a major increase in taxes, a gap will grow between the programs that defense has on its books and the resources likely to be made available to it during the next five years. Somewhere, somehow, something will have to give. The issue is clear; the appropriate choice is a good deal less so.

Certain other data are, or should be, of some relevance to the choices that the Bush administration faces. First, by historical peacetime standards, the level of defense spending is very high. In the 1950s, peacetime budgets averaged $202 billion a year in constant fiscal 1989 dollars; in the 1960s they averaged $224 billion and in the 1970s only $206 billion (table 6). The average for the 1980s was $292 billion, slightly below the request for fiscal 1990. Second, even after four years of real reductions, defense spending today (in constant dollars) is higher than at the peak of the Vietnam War and more than 50 percent higher than the post-Vietnam War low of fiscal 1975. Thus, the problem that Bush faces is not so much the amount of money available to the Defense Department but rather that the amount is far lower than Reagan and Weinberger anticipated in their programs a few short years ago.

The Context of Choice

The context within which defense spending choices will have to be made can suggest the general direction in which it makes sense for the United States to go. Worth stressing at the outset is the fact that the U.S.

Table 5. Estimated Cost of Equipment in the Defense Pipeline, Fiscal Years 1990–99
Billions of current dollars

Component	*Cost*
Army	
Aircraft and helicopter	15.6
Tactical missiles	27.2
Tracked vehicles	20.0
Other procurement	29.6
National Guard and reserve equipment	9.3
Subtotal	101.7
Navy	
Aircraft and helicopters	141.8
Shipbuilding and conversion	107.9
Missiles and torpedoes	70.6
Other procurement	15.2
Marine Corps (ground equipment only)	2.6
Subtotal	338.1
Air Force	
Space	24.0
Aircraft and strategic missiles	306.5
Tactical missiles	22.5
Other procurement	46.6
Subtotal	399.6
General	
Strategic defense initiative	119.3
Classified programs	48.9
Total	1,007.6

Sources: Kaufmann, "Defense Agenda," p. 83; *Armed Forces Journal International*, December 1988, pp. 30, 34, and February 1989, p. 16; *Military Forum*, January–February 1989, p. 28; *Defense News*, February 13, 1989, p. 10, and author estimates.

economy could readily provide for a greatly expanded defense. As former Secretary of Defense Frank Carlucci has recently pointed out, defense spending is a relatively modest 5.6 percent of GNP.[13] Thus the issue, at least in part, is not ability to pay but the willingness of the American taxpayers to sacrifice other goods and services to provide for more defense. At present they show no such willingness; indeed, most opinion polls indicate that 84 percent believe defense spending, even after four years of real reductions, is about right or too high.[14]

There are other reasons for moderating defense expenditures and changing the allocation of whatever resources do become available. Among the

13. Frank C. Carlucci, "No Time To Change U.S. Defense Policy," *New York Times*, January 27, 1989, p. 31.

14. Americans Talk Security, "The Military Budget and Public Opinion," press summary, February 16, 1989.

Table 6. Trends in Defense Budget Authority, Fiscal Years 1951–90
Billions of fiscal 1989 dollars

Year	*Authority*	*Year*	*Authority*
1951	277	1971	226
1952	362	1972	219
1953	298	1973	209
1954	218	1974	201
1955	190	1975	194
1956	193	1976	202
1957	202	1977	212
1958	198	1978	209
1959	210	1979	209
1960	203	1980	213
1961	204	1981	240
1962	235	1982	268
1963	237	1983	289
1964	227	1984	303
1965	218	1985	326
1966	261	1986	312
1967	285	1987	302
1968	289	1988	293
1969	278	1989	291
1970	251	1990	297

Non-war-year average	
1954–60	202
1961–65	224
1973–80	206
1981–90	292

Sources: Office of the Assistant Secretary of Defense, *National Defense Budget Estimates for FY 1989–1990*, pp. 61–66, and Lawrence Korb and Stephen Daggett, "The Defense Budget and Strategic Planning," in Joseph Kruzel, ed., *American Defense Annual, 1988–89* (Lexington, Mass.: Lexington Books, 1988), p. 45.

more powerful is President Bush's commitment, at least for now, to a "flexible freeze" in federal spending that for defense spending means zero real growth, some reallocation of resources within the rest of the budget, and no tax increases.[15] And the president maintains a somewhat elastic commitment to the Gramm-Rudman-Hollings law, which requires the federal budget to be in balance by 1993. In these circumstances, and given congressional reluctance to reduce other parts of the federal budget, increases in defense spending would prove unacceptable or would bring about a sequestration order that would cut the budget to the mandated level and would leave defense in even worse shape, since defense spending

15. George Bush, *Building a Better America*, supplement of message to Joint Session of Congress, February 9, 1989, pp. 17–27.

would have to bear half of the total cuts and the reductions would apply equally in percentage terms to all accounts left unprotected by the president.[16]

These considerations apart, it would be hard to argue that the Defense Department has excelled in managing those funds it has received. Particularly in the first half of the 1980s, it was overwhelmed by what amounted to wartime resources without having had to fight a war. Waste, fraud, and abuse were bound to occur when there was so much money to spend and so few controls on how it was spent. As table 7 shows, nine major systems were procured at well below the minimum economical production rate even at the height of the defense buildup. For some time now, a respite from such an indiscriminate process has seemed in order.

Such a respite seems particularly appropriate in light of events and expected changes in the international environment. The signing of the Intermediate-Range Nuclear Forces Treaty, the Soviet withdrawal from Afghanistan, the end of the Iran-Iraq war, the apparent settlement of several other regional conflicts, and the Soviet and East German promises unilaterally to reduce their conventional forces suggest that a basic shift may be taking place in world affairs. Soviet-American relations in particular may be entering an entirely new phase. The enemy on which so much of U.S. force planning has depended could, like the Cheshire cat, be disappearing before Western eyes.

Whether only the smile will be left remains to be seen. Meanwhile, despite justifiable optimism, the case against radical surgery on U.S. forces and defense budgets continues to be strong. The resumption of real growth is not feasible and is probably not necessary after the huge buildup of the 1980s, but expectations of reductions in U.S. overseas deployments, major cuts in forces, or deep slashes in the defense budget are premature. Mikhail Gorbachev's tenure and power remain highly uncertain, and despite his promises the Soviet Union retains very powerful nuclear and conventional forces. The conditions of U.S. security have not changed: Western Europe, Northeast Asia, the Persian Gulf, and the Caribbean still fall within the U.S. defense perimeter. The United States itself remains potentially vulnerable to attack. And the Soviet Union aside, dangers can still arise from unresolved regional tensions and from terrorism, insurgencies, and the proliferation of both nuclear and conventional technologies.

Ways to reduce the U.S. defense burden without creating new instabilities may materialize, but it is well to remember that arms control

16. Kaufmann, "Defense Agenda," pp. 50–51.

Table 7. Weapons Procured at Less Than Minimum Economical Production Rates, Fiscal Years 1983–87

Weapon system	*Minimum annual economical rate*	*Average annual procurement rate*
AV-8B aircraft	36	34
F-15 aircraft	120	41
Harpoon missile	360	284
MX missile	21	17
HARM missile	3,240	1,460
IIR Maverick missile	6,000	2,205
TOW-2 missile	21,600	15,482
UH-60 Blackhawk helicopter	96	85
Tomahawk cruise missile	300	186

Source: Congressional Budget Office, *Effects of Weapons Procurement Stretch-Outs on Costs and Schedules* (November 1987), p. 11.

agreements are as likely to be long in coming and short on saving money as they have been in the past. Indeed, some agreements may actually suggest higher defense spending. To insist that the allies bear more of the cost of maintaining U.S. forces on their soil is surely not unreasonable. But to pretend that the United States is not the linchpin of the collective security system or that some condominium of other powers can take its place is unreasonable in the extreme. The simple truth is that no one else can play the American role for the foreseeable future. The basic choice even in the 1990s remains U.S. leadership or international anarchy.

However, to make the case for continued U.S. military strength is not to argue that everything must remain as it is. Despite budgetary constraints, the United States still needs major forces that are modern, ready, mobile, and sustainable. At the same time, the future seems to call for hedging against uncertainty while retaining the flexibility to adapt forces and programs to changing conditions and trends. That, indeed, is the challenge of the coming decade for the Bush administration.

The Carlucci Response to the Challenge

Before outlining the specific steps that President Bush and Defense Secretary Richard Cheney might take to adjust the defense program to the projected budget levels and the changing international environment, it is necessary to assess the impact of Frank C. Carlucci, the second secretary of defense in the Reagan administration, on the defense program and budget. Although Carlucci served as secretary for little more than a year,

he had a significant opportunity to affect this nation's international security posture because he was responsible for formulating the Reagan administration's fiscal 1989 and 1990 defense budget requests and the 1990–94 defense program.

The magnitude of the problem Carlucci faced is indicated in table 8, which shows that between 1985 and 1987 the Department of Defense reduced substantially its estimate of the amount of budget authority that would become available in fiscal 1986–90. In early 1985, before the passage of the Gramm-Rudman-Hollings Act, the Pentagon's civilian leadership assumed defense would receive almost $2 trillion in the period. Two years later it recognized that at most it would get $1.5 trillion. However, because of Secretary Weinberger's insistence that the downturn would be only temporary, the department was not allowed to adjust its goals for force structure or slow the pace of modernization. It is no exaggeration to say that Carlucci inherited a $400-billion-a-year program and a $300-billion-a-year budget.

Carlucci's success in reconciling the defense program and budget was mixed. He started well: by February 1988 he had succeeded in reducing the fiscal 1989–93 projections he inherited by $208 billion, about 11 percent (table 9). However, over the next year, he managed to trim only an additional $20 billion, or 1 percent.

Carlucci's February 1988 and January 1989 plans both assumed real growth of 2 percent a year from fiscal 1990 to 1994. However, in the presidential campaign of 1988, neither Bush nor Michael Dukakis would commit himself to any real growth in the defense budget. In fact, on February 9, 1989, President Bush froze defense spending for fiscal 1990 at fiscal 1989 levels and projected only slight real increases for 1991–93.[17] Yet Carlucci insisted until the day he left office that defense could and should receive the full 2 percent real growth; in fact, he continued to lobby for it after he left office.

If the Pentagon receives enough money to keep pace with inflation in fiscal 1990–94—the best it can hope for—total budget authority will have to be cut by another $100 billion (table 10). Zero nominal growth would mean that the Defense Department would have to reduce its projected level of spending by $230 billion.

Adjusting the defense budget is comparatively easy; adjusting the program to conform to that reality is much more complex. In fact the Pen-

17. Bush, *Building a Better America*, p. 138.

Table 8. Department of Defense Five-Year Plans for Fiscal Years 1986–90
Budget authority in billions of current dollars

Plan	*1986*	*1987*	*1988*	*1989*	*1990*	*Total*
Administration request, February 1985	314	354	402	439	478	1,987
Administration request, February 1986	281	312	332	354	375	1,654
Administration request, January 1987	281	282	303	323	344	1,533
Actual authorized	281	279	284	290	306[a]	1,440

Sources: *Department of Defense Annual Report, Fiscal Years 1986, 1987, 1988.*
a. Estimated

tagon's plan was so far removed from plausible budgetary constraints that it was not produced in 1987 and 1988.[18] The question, then, is whether Carlucci's reductions were programmatic or simply budgetary. Is the fiscal 1989-94 program still significantly underfunded even if the defense budget grows by 2 percent a year in real terms?

In approaching his task of reducing the projected fiscal 1989 defense budget by $33 billion and the fiscal 1989-93 program by $207 billion, Carlucci established reasonably clear priorities. In memoranda issued shortly after he took office, he instructed the services to achieve the necessary reductions by terminating programs, cutting force structure and personnel, and deferring new programs. The armed services were cautioned not to reduce budgets by the time-honored but wasteful practice of simply stretching out programs. The highest priorities, Carlucci said in releasing his fiscal 1989 and 1990 budgets, were quality people, readiness, and efficient acquisition.[19]

In the fiscal 1989 budget Carlucci terminated seventeen programs for a total savings of $4.8 billion in 1989 and $51.7 billion in the 1990s (table 11). However, 45 percent of the savings in 1989 and 77 percent of the total savings were projected to come from one program, the Midgetman land-based small mobile missile, a program favored by the Democratically

18. Lawrence J. Korb, "Spending Without Strategy: The FY 1988 Annual Defense Department Report," *International Security*, vol. 12 (Summer 1987), p. 172; and Cheryl Pellerin, "Nunn Sees Defense Cuts of $325 Billion," *Defense News*, October 24, 1988, p. 1.

19. Paul Mann, "Taft Memos Order Budget Cuts, Emphasize Weapons Terminations," *Aviation Week and Space Technology*, December 7, 1987, pp. 24–26; Office of Assistant Secretary of Defense (Public Affairs), "Amended FY 1988/FY 1989 Department of Defense Budget," press release, February 18, 1988; and Office of Assistant Secretary of Defense (Public Affairs), "FY1990/FY1991 Department of Defense Budget," press release 1-89, January 9, 1989. Unless otherwise noted, information in the next five paragraphs is from these press releases.

Table 9. Department of Defense Five-Year Plans for Fiscal Years 1989–93
Budget authority in billions of current dollars

Plan	*1989*	*1990*	*1991*	*1992*	*1993*	*Total*
Weinberger plan, January 1987	323	344	365	387	413	1,832
Carlucci plan, February 1988	291	307	324	342	360	1,624
Carlucci plan, January 1989	290	306	321	336	351	1,604
Difference, January 1987–February 1988	32	37	41	45	53	208
Difference, January 1987–January 1989	33	38	44	51	62	228

Sources: Office of the Assistant Secretary of Defense (Public Affairs), "FY 1990/FY 1991 Department of Defense Budget," press release 1-89, January 9, 1989; and *Department of Defense Annual Report, Fiscal Year 1988*.

controlled Congress. None of the others was significant in either strategic or monetary terms. Carlucci also deferred or slowed down the planned pace of nine ongoing programs, which resulted in cost deferrals of $1.05 billion in fiscal 1989 (table 11). Finally, he delayed the start of eight programs for a total savings of $441 million. Of the seventeen programs deferred or delayed, only the LHX (light helicopter, experimental), the MK-48 torpedo, and the B-1B bomber enhancements have much budgetary significance. Although delaying them will save money in the short term, they will inevitably cost more in the long term if the planned number of units is finally procured. The Defense Department still spent $850 million on these programs in fiscal 1989, and costs for 1989–91 will rise to $2.78 billion (table 12).

Carlucci claimed to have continued his original priorities in the fiscal 1990–94 program. In January 1989 he canceled an unspecified number of programs and delayed the start of another thirteen beyond 1990–91.

Table 10. Department of Defense Budget Authority, Fiscal Years 1990–94
Billions of current dollars

Plan	*1989 base*	*1990*	*1991*	*1992*	*1993*	*1994*
January 1989	290	306	321	336	351	366
Flat in real terms	290	299	308	316	323	330
Flat in nominal terms	290	290	290	290	290	290
Cumulative shortfall						
Flat in real terms	. . .	7	20	40	68	104
Flat in nominal terms	. . .	16	47	93	154	230

Sources: *Department of Defense Annual Report, Fiscal Year 1990*, p. 89; and author estimates.

Table 11. Projected Savings from Defense Program Terminations and Deferrals, Fiscal Year 1989 and Beyond
Millions of current dollars

Service	Program	Savings[a]	
		1989	1989 and beyond
Terminations			
Army	Aquila remotely piloted vehicle	226	1,096
	Antitactical missile	35	149
	EH-60 helicopter	45	45
	M198 howitzer	20	91
	120mm mortar	24	161
	Copperhead artillery shell	106	747
	Subtotal	455	2,289
Navy	A-6F aircraft	918	5,655
	Navy airship	62	135
	Antiradiation seeker	8	109
	High-frequency antijam (HFAJ) radio	52	87
	Skipper II guided missile	37	209
	Subtotal	1,077	6,194
Air Force	Antisatellite (ASAT) program	786	2,218
	Midgetman missile	2,150	39,790
	Minuteman III penetration aids	129	561
	C-27 aircraft	65	65
	AGM-130 air-to-ground missile	92	401
	Airborne command post replacement	14	140
	Subtotal	3,237	43,175
	Total	4,769	51,658
Deferrals			
Army	Forward area air defense	128	. . .
	Advanced antiarmor weapons–heavy	92	. . .
	Armored family of vehicles	45	. . .
	LHX helicopter restructure	407	. . .
	Army data distribution system	86	. . .
Navy	Advanced air-to-air missile	57	. . .
	MK-48 torpedo	113	. . .
	MK-50 torpedo	80	. . .
	Vertical launch air-to-surface rocket	45	. . .
	Total	1,050	. . .

Sources: Office of the Assistant Secretary of Defense (Public Affairs), "Amended FY 1988/FY 1989 Department of Defense Budget," press release 81-88, February 18, 1988; and *Budget of the United States Government, Fiscal Year 1990*, p. 10-18.

a. Columns may not add up because of rounding.

However, none was considered significant enough to be listed in the *Department of Defense Annual Report* for 1989.

He also proposed various minor manpower and force structure changes in the fiscal 1989 budget and carried them forward through 1990. In early

Table 12. Projected Cost of Major Deferred Programs, Fiscal Years 1989–91
Millions of current dollars

Program	*1989*	*1990*	*1991*	*Total*
LHX helicopter	124	241	447	812
MK-48 torpedo	481	501	412	1,394
B1-B bomber	243	132	194	569
Total	848	874	1,053	2,775

Source: *Department of Defense Annual Report, Fiscal Year 1990*, pp. 135, 152, 190.

1987 the Defense Department had assumed that its total force strength in 1989 would be 4,522,000 active-duty personnel, selected reserves, and direct-hire civilians. In his fiscal 1989 budget request, Carlucci reduced the number on the payroll to 4,413,000 by cutting 46,000 active-duty military personnel, 40,000 selected reserves, and 23,000 civilians. His fiscal 1990 and 1991 budgets left these strengths virtually the same. The manpower savings will cut $3.2 billion from the projected defense payroll in fiscal 1989 and another $4.2 billion in 1990. Of the reductions in force structure in the fiscal 1989–93 program, the most significant were the deletion of one active Army brigade and two Air Force tactical air wings and the retirement of sixteen older Navy frigates. These changes should save about $2 billion a year in operating costs between fiscal 1989 and 1994.

Even though Carlucci made readiness his highest priority, he allowed some diminution of readiness and sustainability for each of the services in his two budget exercises. The operating tempos or training rates of Army tank units were cut by 6 percent from 850 tank miles a year to 800, while Army helicopter flying time is still at its 1980 level and well below the objective of the service. The Army also suffered a decline in munitions sustainability. Since 1987 the Navy has annually deferred the overhaul of four ships because of a lack of funds, and this practice is likely to persist over the next few years. Finally, the Air Force accrued a significant shortfall in war reserve materiel, particularly spare parts.[20]

Table 13, which compares Carlucci's fiscal 1989, 1990, and 1991 budgets with the fiscal 1989 projections inherited from Secretary Weinberger, shows that Carlucci succeeded in slightly altering the budget priorities of his predecessor. By fiscal 1991, when nominal defense spending will have returned to its projected 1989 level, Carlucci's changes will have shifted about $5 billion from investment into readiness (personnel and maintenance). Thus he appears to have followed through on his pledge to emphasize the readiness of the current force more than modernization.

20. *Department of Defense Annual Report, Fiscal Year 1990*, p. 129, 143, 160.

Table 13. Defense Budgets, by Program Category, Fiscal Years 1989–91
Billions of current dollars

Category	*1989 request*[a]	*1989 revised*[b]	*1990 request*	*1991 proposed*
Military personnel	81.6	78.6	79.8	82.1
Operation and maintenance	91.5	85.9	91.7	95.5
Procurement	94.6	80.0	84.1	91.9
Readiness	27.1	23.1	23.0	25.1
Modernization	67.5	56.9	61.1	66.8
Research, development, test, and evaluation	44.3	37.5	41.0	41.3
Military construction	10.6	9.0	8.6	9.6
Total	322.6	290.2	305.2	320.4

Sources: *Department of Defense Annual Report, Fiscal Year 1990*, p. 219; Lawrence J. Korb and Stephen Daggett, "The Defense Budget and Strategic Planning on a New Plateau," in Daggett and others, *The Military Budget on a New Plateau: Strategic Choices for the 1990s* (Washington: Committee for National Security, 1988), p. 19; and Office of Assistant Secretary of Defense (Public Affairs), "Amended FY 1988/FY 1989 Department of Defense Budget," News Release 81-88, February 18, 1988.

a. Submitted in January 1987 as part of a biennial fiscal year 1988–89 budget.
b. Submitted in February 1988.

However, this shift only holds true if one looks at the procurement account as a whole. If procurement is broken into its two components, readiness and modernization, a different picture emerges: items critical to readiness—spare parts, munitions, support equipment—are acquired in this account along with major systems such as planes, ships, tanks, and strategic missiles. After assuming office, Carlucci treated major systems or modernization procurement much more favorably than readiness procurement (table 13). He cut both by about 15 percent in his first submission, but for fiscal 1990, he increased spending for the big-ticket items by 7 percent while leaving readiness procurement essentially flat. And his 1991 projection widens the disparity even more by proposing a 13 percent increase in modernization and 9 percent for readiness procurement.

While Carlucci's choices pointed U.S. defense in the right direction, he did little to ameliorate the Pentagon's long-term budget problems. The military still has a force structure that is either too large for adequate budgetary support or one that is being modernized too quickly. Indeed, the five-year defense plan Carlucci left behind still shows $45 billion in unitemized subtractions. These "negative funding wedges" are labeled program estimates and must be specified and approved by Congress if defense is to grow at no more than 2 percent a year from 1990 to 1994.[21]

21. "Cuts That Don't Hurt," *National Journal*, February 4, 1989, p. 269.

To add to the problems, the economic assumptions underlying the projected five-year defense plan are unrealistic. In the budgets for fiscal 1990–94, defense "saves" $31 billion at its 2 percent real growth level simply by changing some of the prices upon which the budget is based (table 14). If oil prices do not fall by 10.3 percent in fiscal 1990, if civilian pay raises do not stay at 2 percent, and if inflation does not stay at 3.6 percent, the Pentagon will have an even more serious problem as it tries to reconcile its program with its budget. One defense publication called the fiscal 1990 defense request "unrealistic at its core."[22] If the assumptions underlying the current five-year plan prove too optimistic and if a nominal freeze is imposed, the Defense Department could be forced to find $410 billion in program cuts over the next five years (table 14). Even if the department receives enough funding to keep pace with inflation and the economy performs much better than expected, its program would still be underfunded by $150 billion over the next five years.[23] Reductions of that magnitude in the proposed fiscal 1990-94 program, coming on top of about $500 billion in reductions to the projected fiscal 1986-90 program, should entail dramatic changes in defense planning.

A More Flexible Response

Whatever else may be said, one aspect of Carlucci's response to the challenge of the future was almost certainly unrealistic: Congress will not appropriate a 2 percent real increase in defense budget authority as long as President Bush refuses to raise taxes, other national needs are assuming increased importance, and the president's highest priority is to reduce the federal budget deficit. Indeed Mr. Bush has already ordered the Pentagon to freeze defense authority for fiscal 1990 at its 1989 level in real terms and has limited increases in the following three years to 1 percent, 1 percent, and 2 percent (table 15).

Modernization

Despite these new constraints, a more serious problem for the longer term has been the failure to develop a coherent, consistent policy on the

22. "Weapons Summit," *Aviation Week and Space Technology*, January 16, 1989, p. 7.

23. Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, pt. 2 (March 1988), table 1.

Table 14. Defense Budget Projections and Potential Shortfall in Program Support, Fiscal Years 1990–94
Billions of current dollars

Projections	*1990*	*1991*	*1992*	*1993*	*1994*
February 1988 (Carlucci plan)	307	324	342	360	378
January 1989 (Carlucci plan)	306	321	336	351	366
Cumulative difference	1	4	10	19	31
Cumulative potential shortfall of 1989 plan	24	71	158	271	410
Component:					
Inflation greater than expected	1	4	10	19	31
Unitemized subtractions (funding wedges) included	0	0	15	30	45
Effects of real freeze	7	20	40	68	104
Effects of nominal freeze	16	47	93	154	230

Sources: *Department of Defense Annual Report, Fiscal Year 1989* and *Fiscal Year 1990*; and author projections.

modernization of the armed forces. Owing to the munificent funding of the early 1980s and the expectation that it would continue, the armed services engaged in an uncoordinated, redundant scramble to develop and deploy wholly new systems even before the current wave of modernization had been completed. And the scramble has continued despite the real decreases in the defense budget. As one consequence, the Pentagon is running up an enormous investment bill that, before being paid in full, will crowd out even the needs of the operating and support accounts unless

Table 15. Carlucci and Bush Budget Authority and Outlay Projections, Fiscal Years 1989–93
Billions of current dollars

Item	*1989*	*1990*	*1991*	*1992*	*1993*	*Total difference*
Authority						
Carlucci (1989)	290.2	305.6	320.9	335.7	350.7	. . .
Bush	290.2	299.3	311.0	322.0	335.9	. . .
Difference	0	6.3	9.9	13.7	14.8	44.7
Outlays						
Carlucci (1989)	289.8	293.8	304.7	316.2	329.3	. . .
Bush	289.8	291.2	298.8	306.8	317.4	. . .
Difference	0	2.6	5.9	9.4	11.9	29.8

Sources: *Department of Defense Annual Report, Fiscal Year 1990*, pp. 83, 89; and George Bush, *Building a Better America*, February 9, 1989, p. 139.

future budgets are afforded annual real increases much higher than the 2 percent requested by Carlucci.

Apart from instituting more centralized and disciplined planning, the Pentagon must recognize that modernization need not entail wholesale change. Modernization consists of two basic components. The first concerns changes in the launching platforms—aircraft, ships, tracked vehicles, and so forth—from which the warheads, bullets, tactical missiles, and other munitions are fired. The second encompasses the munitions themselves and all the subsystems associated with their reliable and accurate delivery to designated targets. Thus if platforms are appropriately designed, modernization need not (and in practice does not) require the introduction of entirely new systems at relatively short intervals.

Since World War II, in fact, the United States has rolled over its inventory of platforms approximately every two decades—the Trident submarine came along twenty years after the Polaris, the F-15 fighter twenty years after the F-4, and the M-1 tank twenty years after the M-60—without any major failures of deterrence or any sacrifice of performance in combat operations. This history, combined with the technological advantages that the United States and its allies maintain over potential enemies, suggests that despite recurrent alarms about bomber and missile gaps or windows of vulnerability, despite fears of failing to field new weapons quickly enough, changes in the basic inventory of platforms should be slowed rather than accelerated. Claims to the contrary notwithstanding, U.S. defense appears to be keeping up with the Soviet Union. For at least another five years America could accomplish more with the same amount of funds by upgrading current platforms through improving subsystems than by rushing to replace them, especially since more significant technological changes appear to be taking place in munitions and subsystems than in platform design.

In addition to continuing to replace platforms only every twenty years or so, it probably makes sense to design new systems with attention to realistic cost constraints instead of trying to satisfy stringent performance requirements that are as likely to be based on what U.S. technology might be capable of accomplishing as on sober estimates of evolving threats. Exactly what the costs should be undoubtedly will have to vary with the individual system. However, if it is assumed that in peacetime—as has been the case with both the Soviet Union and the United States over the past forty-five years—defense budgets will increase in real terms by an average 3 percent a year because of technological improvements and

increased operating and support costs, a next generation of systems should cost no more than twice its predecessor in constant dollars. Thus if a B-52 were to cost about $130 million in current prices, its successor should be designed to cost no more than $260 million, or slightly less than the price of the B-1B.

Such an approach would ensure greater predictability in the budget process and give system designers more freedom to envision the best possible performance within a known cost constraint. It would also allow ample time for prototyping, testing, and evaluating new systems before going into production and would minimize the flaws and waste associated with concurrent development and production of systems and subsequent efforts to repair defects by means of extensive changes and retrofits off the production line. Finally, a cost-based approach would help prevent bringing in new systems before the current wave of modernization has been completed and field units have learned to exploit existing technologies.

Strategic Nuclear Forces

Nowhere did the Reagan administration differ more from a cost-based approach than in its efforts to modernize the strategic nuclear forces. It inherited a triad of capabilities (intercontinental ballistic missiles, submarine-launched ballistic missiles, and bombers) that comprised more than 1,800 launchers and 9,000 warheads (table 16). Even after a well-executed Soviet first strike, an all-out U.S. retaliation was expected to deliver some 3,000 warheads to a wide range of targets in the Soviet Union. In addition, the president could withhold certain parts of the force (particularly the SLBMs) and avoid direct attacks on a number of targets, including cities. All in all the deterrent was a powerful one.

Despite the general adequacy of the strategic forces, the Ford and Carter administrations had had three concerns about future capabilities. First, they feared that the land-based ICBMs would become increasingly vulnerable as the Soviet Union improved the accuracy and reliability of its heavy, MIRVed (multiple, independently targetable, reentry vehicles) ICBMs. Second, they expected the B-52 force to experience growing attrition, not because they were older than the pilots who flew them (owing to many upgrades they were not) but because more effective Soviet defenses would find the planes easier to locate, even at low altitudes, and to track and attack. Third, they were concerned about the aging of the

Table 16. Strategic Nuclear Forces, by Type, Fiscal Year 1990

Type	*Launchers*	*Warheads*	*Second-strike delivered warheads*
Offensive			
ICBMs			
Tital II	52	52	11
Minuteman II	450	450	162
Minuteman III	550	1,650	594
Subtotal	1,052	2,152	767
Bombers			
B-52D	75	600	127
B-52G	145	1,740	367
B-52H	96	1,152	243
FB-111	56	336	71
Subtotal	372	3,828	808
Submarine-launched ballistic missiles			
Polaris	80	80	32
Poseidon (C-3 and C-4)	336	3,040	1,459
Subtotal	416	3,120	1,491
Total offensive	1,840	9,100	3,066
Defensive			
Strategic defense interceptors			
Active	127	. . .	. . .
Air National Guard	165	. . .	. . .
Total defensive	292	. . .	. . .

Sources: *Department of Defense Annual Report, Fiscal Year 1989*, p. 313; and author estimates.

ballistic missile submarine force and committed to improving its status as the backbone of the triad.

To deal with these potential inadequacies, the Defense Department (in some cases well before the Ford and Carter administrations) devised various remedies. Two hundred MX missiles, with 2,000 warheads, were to be developed and deployed in a "racetrack mode" as a substitute for the ICBM force in its fixed, hardened silos. Some B-52s would be upgraded yet again to improve their penetration capabilities, and others would be armed with the new standoff ALCM (air-launched cruise missile). Plans for the B-1A bomber would be canceled and development would proceed with the stealth (B-2) bomber. The large Trident submarine, with twenty-four launchers instead of sixteen would initially carry the C-4 (Trident I) missile and would eventually be equipped with the much more accurate

D-5 (Trident II) SLBM. Thus all three legs of the triad would be modernized and made less vulnerable, the number of warheads in the force would be increased, and the combination of the MX and D-5 missiles would give the offense an even more impressive prompt, hard-target kill capability than the Minuteman III with its Mark-12A warheads.

The Reagan administration not only adopted most of these measures (the main exception was the racetrack basing mode for the MX missile) but added to them. It proposed to upgrade the Minuteman III and to provide new penetration aids for the Minuteman II. Fifty MX missiles were to be placed in fixed Minuteman silos and another fifty were to sit on trains (the rail garrison MX), ready to dash onto the rails upon receipt of an unspecified kind of warning. At the same time, because of pressure from some members of Congress and its own commission on strategic choices (the Scowcroft Commission), the administration ordered work to begin on a small ICBM (popularly known as Midgetman), which would be mounted on special transporters that would roam military reservations and disperse still further upon warning. The bomber leg of the triad fared equally well. The B-1 bomber was revived as the B-1B and rushed into production. The advanced cruise missile, allegedly with stealth features, proceeded into development as a successor to the air-launched cruise missile (ALCM). Development of the B-2 (stealth) bomber was continued, and the plane made its public debut in late 1988. Only the SLBM force evolved essentially as planned. Even continental air defenses underwent a face-lift with the modernization of the distant early warning line (now known as North Warning), the acquisition of new interceptors, and the deployment of the OTH-B (over-the-horizon–backscatter) radars. The Reagan administration also pursued development of an ASAT (antisatellite) system and, in its most dramatic gesture, the president himself launched the strategic defense initiative (SDI) in March 1983 to make ballistic missiles impotent and obsolete. Indeed, over the next six years Reagan requested more than $26 billion to realize this vision, although an insufficiently enraptured Congress has (for the past five years) appropriated less than 75 percent of the total, not counting the funds that went into a multitude of research programs on directed energy before the president achieved his special vision and consolidated the programs into a single Strategic Defense Initiative Office.[24] The Reagan administration's efforts increased the portion of the defense budget spent directly on strategic forces and

24 "'Star Wars' Budget Figure," *New York Times*, January 27, 1989, p. 1.

related research from 11 percent in 1980 to 16 percent in 1985. Actual spending went from $11 billion to $27 billion.

Secretary Carlucci's five-year defense plan appeared to reduce somewhat this scattershot approach to strategic nuclear planning. In a decision unlikely to stand, it ended work on the small ICBM and bowed to Air Force preference for the rail garrison MX. The plan also continued SDI at a rapid pace, but from a lower funding base than the administration had originally envisioned. However, the basic problems of the original Reagan program still remained. Indeed, when Carlucci left office, strategic programs (as defined in the mission budget) continued to consume 14 percent of the defense budget.

Nowhere are problems more evident than in the struggle to modernize the ICBMs. In the past the silo-based force performed at least two valuable functions. It provided a highly survivable, controllable capability that could attack hard as well as soft targets with more than a minimal probability of success. Equally important, it made knocking out both the U.S. alert bombers and the ICBMs extremely difficult if not impossible for an enemy first-strike planner. Even though the value of the first function is now in doubt because of the increasing accuracy of heavy Soviet ICBMs, the silo-based Minuteman force (along with the fifty MXs in fixed silos) is still more than adequate to perform the second function, despite unsubstantiated rumors that the Soviet Union is taking steps to be able to destroy both the ICBMs and alert bombers on the ground.[25] Meanwhile the D-5 (Trident II) missile can provide whatever hard-target kill capability is deemed necessary, even though some may argue speciously that communication difficulties will prevent the prompt use of warheads based on submarines. In the circumstances, it is reasonable to ask why either the rail garrison MX or the small ICBM is needed.

To be sure, there is a considerable and appropriate tradition of wanting to provide extra insurance in the design of the strategic nuclear forces and an understandable desire to deploy offensive forces that, with the exception of the recallable bombers, do not have to depend on warning (with its false alarms) to survive but can ride out an attack and still retaliate as planned. Even today the triad satisfies both requisites, and its continuation is therefore much to be desired—but not at any price. And there lies one of the two high hurdles for both the rail garrison MX and the small ICBM.

25. Brent Scowcroft and R. James Woolsey, "Defense and Arms Control Policy," in *American Agenda: Report to the Forty-First President of the United States*, pt. 3, pp. 2–3.

The MX is cheaper than the Midgetman, but both are expensive.[26] And it remains unclear how much warning either will need if it is to have a high probability of surviving an enemy first strike. At the moment the small ICBM looks better because of its second-strike performance, but neither seems a very good bet for early procurement and deployment, especially when the need for them is questionable and defense funding remains tight.

What is happening in the program to modernize bombers is equally troublesome. The issue is not so much the survivability of alert bombers on the ground as it is their ability to penetrate upgraded and more efficiently operated Soviet air defenses. Clearly, the issue must be faced; but whether it has to be resolved with a rapid sequence of such new penetrating devices as the air-launched cruise missile, the advanced cruise missile, and the B-1B and B-2 bombers is another matter entirely. The Air Force has now worked with the ALCM for ten years; presumably the system is reliable and accurate enough to have a high probability of penetrating Soviet air defenses and destroying fixed targets not already covered by ballistic missiles. The ACM, with its stealth technology, should have a somewhat higher probability of kill and promises to counteract any improvement in Soviet airborne radar used to direct antiaircraft weapons—so-called look-down, shoot-down capabilities—beyond what is reasonable to expect in the coming decade.

What task, then, is left to the manned, penetrating bomber? One possibility is for it to serve as insurance against the failure of the cruise missiles, provided that it is difficult to detect by radar except at short ranges. But bombers are very expensive insurance: in the past eight years 60 percent of the strategic offensive budget has been spent for bombers—at least $28 billion of it on 100 B-1Bs—yet they still have serious flaws as penetrating bombers, flaws that the Congressional Budget Office estimates could cost $8 billion to fix.[27] Rather than continue to repair their defects, the Defense Department might better convert them into the Rolls Royces of cruise missile carriers. The B-2 is even more costly and untried; the Air Force wants 132 of them at a projected price of at least $68 billion, or more than $500 million a copy, but has failed to explain what the B-2 can do that cannot be done more efficiently by ballistic and cruise

26 Stephen Daggett and others, *The Military Budget on a New Plateau: Strategic Choices for the 1990s* (Washington: Committee for National Security, 1988), table 9.

27 Molly Moore, "Upgrading B1 Could Cost $8 Billion, Hill Told," *Washington Post*, August 23, 1988, p. A4.

missiles. To proceed with production without adequately defining the B-2's mission or subjecting it to rigorous testing and evaluation would be imprudent at the very least. Indeed, however great the merits of stealth technology, its application to a nuclear bomber likely to be on a one-shot mission seems misplaced. True, it is argued that the B-2 (like the B-52s in Vietnam) could be used on conventional bombing missions, and Air Force officials have contended that it would have been perfect for the 1986 bombing of Libya.[28] But whether use on such missions constitutes a plausible argument in light of the small number of bombers and their high unit cost is open to question. The B-2 may prove a technological marvel, as the RB-70 did in its day, but it too could be an expensive strategic mistake and end up in a museum.

There is, of course, one possibility that cannot be overlooked: that the B-2, the MX, the D-5, the nuclear attack submarine SSN-21 (Seawolf), and a deployed antiballistic missile defense as an outgrowth of SDI could be seen as enabling U.S. strategic forces to destroy all fixed hard targets in the Soviet Union, hunt down land-mobile and submarine-based ballistic missiles, and intercept any warheads that escape the attention of the offense. But if such is the vision, it is defective. Given the prospect of Soviet countermeasures, such a system of offense and defense would not be likely to keep U.S. fatalities low, and it would be difficult, in any event, to persuade an American president otherwise. As President Reagan, despite his advocacy of SDI, said many times, a nuclear war cannot be won and must never be fought.[29] Furthermore, any such vision flatly contradicts the goal of mutual deterrence sought by the United States in the strategic arms reduction talks (START). Whatever the merits of particular proposals in START—and they do deserve serious review—they presumably are intended to ensure that, at lower levels of launchers and warheads, each side will retain a significant and roughly equivalent retaliatory capability.

That goal suggests the strategy and force structure the United States should consider adopting in the 1990s. What has been called in the past a countervailing strategy still seems most appropriate. Such a strategy implies the ability of the United States to reply in kind (but not necessarily in numbers) to any nuclear attack that the Soviet Union might undertake and to halt an exchange before population centers become targets. In other

28. "The Stealth Bomber Won't Breeze by the Budget Boys," *Business Week*, December 12, 1988, p. 76.

29. *Department of Defense Annual Report, Fiscal Year 1986*, p. 45.

words, however unlikely, if the Soviet Union should launch an attack against American missiles and bombers, the United States should have the forces necessary to respond against equivalent targets—to demonstrate that an attempt at a disarming first strike had failed—as well as the communications to withhold other survivable forces so as to offer the opportunity to end the folly.

In principle, a submarine-based ballistic missile force equipped with a modest number of D-5 hard-target killers could satisfy all the conditions of a countervailing strategy. Moreover, such a force would be the cheapest available, measured in the cost of second-strike delivered warheads. However, prudence and uncertainty, particularly with regard to the survivability of submarines, dictate three other broad measures. The first is a continuation of the triad based not only on the SLBMs but also on the current ICBM force and ALCMs aboard B-52 and B-1B bombers. The second is a deferral of any early deployment of such systems as the rail garrison MX, the small ICBM, the B-2 bomber, and large numbers of D-5 SLBMs pending the outcome of the START talks. The third is a research and development program that would hedge against future and unfavorable events by allowing the testing and evaluation of no more than six B-2 bombers, modest funding for the Midgetman (but not for the rail garrison MX), the design of a ballistic missile submarine smaller than the Trident and with fewer launchers, and a level of effort on SDI (including any spinoff for antisatellite systems) that would not exceed $3 billion a year in current dollars for fiscal 1990–94. Table 17 shows that the Carlucci strategic program spending could be reduced by two-thirds if these three measures were adopted. Table 18 summarizes the kind of force that could be deployed under a nominal freeze by the mid-1990s and the number of warheads the force should be able to deliver on Soviet targets in a second strike. From a day-to-day alert (the normal peacetime status of the force), some 3,600 warheads could reach their destinations, a capability more than strong enough to ensure strategic deterrence while helping the Defense Department deal with the budgetary freeze and reducing to its pre-Reagan level the share of the defense budget devoted to strategic forces.[30]

30. Representative Les Aspin (Democrat of Wisconsin), chairman of the House Armed Services Committee, and the Center for Strategic and International Studies (CSIS) recommend severe reductions in the planned level of strategic expenditures. They would freeze spending at the fiscal 1989 levels for the next decade and give funding priority to Midgetman and Trident. George C. Wilson, "Pool Strategic Funds, Aspin Warns," *Washington Post*, January 12, 1989, p. 26; and Molly Moore, "Group Urges Cut in Stealth Bomber Production," *Washington Post*, December 29, 1988, p. 6.

Table 17. Strategic Nuclear Program Savings from a Nominal Freeze, Fiscal Years 1990–94
Billions of current dollars

System	*Estimated costs of Carlucci plan*	*Estimated costs under nominal freeze*	*Estimated saving*
B-1B bomber	3.0	0.5	2.5
B-2 stealth bomber	40.7	3.0	37.7
Advanced cruise missile (ACM)	7.8	7.8	0
Rotary launcher	0.4	0.4	0
SRAM-II short-range attack missile	2.1	0.6	1.5
KC-135R tanker	7.8	6.1	1.7
OTH-B radar	1.1	1.1	0
Minuteman II penetration aids	0.6	0	0.6
Minuteman III upgrades	0.3	0.3	0
Rail garrison MX	21.0	0.5	20.5
Small ICBM (Midgetman)	0	5.0	−5.0
Trident II submarine	8.1	8.1	0
Trident II (D-5) ballistic missile	25.6	8.3	17.3
Antisatellite system (ASAT)	4.0	0.6	3.4
TR-1 surveillance aircraft	0.4	0.4	0
Defense support program	5.3	5.3	0
Global positioning satellite	3.5	3.5	0
Defense meteorological support program	1.8	1.8	0
Strategic defense initiative (SDI)	48.4	15.0	33.4
Total	181.9	68.3	113.6

Sources: Kaufmann, "Defense Agenda," pp. 78, 90–91, and author estimates.

Tactical Nuclear Forces

Since the ratification of the INF Treaty, consideration of the balance of conventional forces, especially those in Europe, has become more fashionable. But even though their focus has shifted, many Europeans continue to hold ambivalent attitudes toward nuclear weapons in general and those based in Europe in particular. They see the systems as a wondrously cheap deterrent to World War III, but they give every indication that they would resist any use of nuclear weapons, even those confined to the battlefield. To what extent this ambivalence undermines deterrence, or would undermine it in the event of a major crisis, has fortunately not been tested.

Table 18. Strategic Nuclear Forces' Performance under a Nominal Budget Freeze, Fiscal Year 1994

Delivery system	*Number of launchers*	*Number of warheads*	*Alert on-station rate (percent)*	*Probability of delivery (percent)*	*Expected number of warheads delivered*
B-52 (ALCM)	150	3,000	30	72.0	648
B-1B (ACM)	90	2,520	30	72.0	544
Minuteman II	352	352	90	3.2	10
Minuteman III	350	1,050	90	3.2	30
MX	50	500	90	3.2	14
Poseidon C-3	128	1,280	45	80.0	461
Poseidon C-4	192	1,344	45	80.0	484
Trident C-4	264	1,848	54	80.0	798
Trident D-5	192	1,344	54	80.0	581
Total	1,768	13,238	. . .	. . .	3,570

Sources: Congressional Budget Office, *Modernizing U.S. Strategic Offensive Forces: Costs, Effects, and Alternatives* (November 1987), pp. 81, 82–83, 84–85, and author estimates.

Other influential attitudes have also dogged the structuring of the tactical nuclear forces. One prevalent in West Germany is that nuclear weapons fired from German soil should land on someone else's territory, even though such a launch would almost certainly result in retribution against Germany. Another is that a U.S. president would somehow be more willing to fire weapons from land bases in Europe than from submarines, or silos in the United States, even though most presidents who have thought about the matter doubt that Soviet leaders would care as much about the location of the launcher as they would about the perpetrator of the act. Nonetheless, at least some allied officials remain concerned about the consequences of INF. The treaty, as they see it, has weakened nuclear deterrence because, while it has removed four times more Soviet than U.S. warheads from the area, it has left NATO with an inadequate inventory of nuclear launchers—artillery, short-range missiles, dual-capable aircraft—most of which would aim at targets in West or East Germany. Many of the same officials fear that the treaty represents a first step toward a denuclearized Europe, even though France and the United Kingdom would still have their own nuclear forces.

Of course, if conventional stability could be achieved in central Europe, and could be seen as having been achieved, these nuclear issues might fade into the background. Meanwhile, there is no evidence to suggest that the United States has any intention of withdrawing its remaining nuclear

launchers from Europe, even though, with the agreement of the allies, it is reducing somewhat its large stockpile of nuclear weapons located there. The Pentagon has even proposed ways to cover targets in Eastern Europe and the Soviet-based nuclear threats to Western Europe without violating INF. The Army has offered to extend the range of the multiple-launch rocket system (MLRS) or the Lance missile, both already stationed in Europe, but they would require new missiles. Assuming that additional funds became available, the Air Force could be persuaded to build the tactical air-to-surface missile (TASM), tailored to conform to the 500-kilometer limit INF allows short-range missiles. Independently of INF, the Navy continues to move toward its goal of more than 700 Tomahawk land-attack nuclear missiles (TLAM-N) based on ships and submarines that could be in a position to fire at targets in central Europe if and when the order to do so were transmitted.[31] U.S. strategic forces also continue to dedicate 400 SLBM warheads to the coverage of the nuclear threat to Europe. With the Soviet Union's removal of SS-4, SS-5, and SS-20 ballistic missiles—but not the Badger, Blinder, and Backfire medium bombers—some SLBM warheads could be reallocated to other targets and thereby make up for the loss of the Pershing II ballistic missiles and the ground-launched cruise missiles (GLCMs) prohibited by INF. Indeed, reallocation is the most efficient way to relieve whatever fears about the adequacy of whatever allied intermediate-range nuclear forces still exist in West Germany and the other NATO countries. What is more, the reallocation entails no incremental financial cost to the United States and no political pain to the members of the alliance.

Conventional Forces

Judgments about the plans of the Reagan administration for conventional forces are more difficult to make, in part because it remains unclear how far the Soviet Union and its cohorts are prepared to go, unilaterally as well as by negotiation, in reducing their very large ground and tactical air forces. Another difficulty arises from the Reagan administration's refusal to relate U.S. conventional capabilities to any strategy other than the vague concept of horizontal escalation or being able to conduct a worldwide war against the Soviet Union. There has also been talk in the Pentagon and in the Bush White House about engaging in "competitive

31 *Department of Defense Annual Report, Fiscal Year 1989*, pp. 242–43.

strategies" to exploit U.S. strengths and enemy weaknesses, although the reality of defense modernization plans for nuclear or conventional forces has not matched the rhetoric of the competitive strategies' advocates. Indeed once these advocates began to try to change modernization plans, they were met with fierce resistance from the services and the Joint Chiefs of Staff, who convinced the deputy secretary of defense to muzzle them.[32]

Despite this lack of specific guidance, the Joint Chiefs have followed the practice under previous administrations of requesting forces to deal with specific contingencies in conjunction with allies. In the past, at least in the eyes of the Joint Chiefs, that has meant a strategy with five major components:

—forward defense of such critical areas as northern Norway, central Europe, Thrace, the oil states of the Persian Gulf, South Korea, Alaska, Panama, and the Caribbean, but with the option, given the forces generated for these purposes, to use the forces elsewhere as other contingencies arise and the president might direct;

—defense of the four major sea lanes to Europe, the eastern Mediterranean, Northeast Asia, and the Persian Gulf;

—overseas deployment of ground, air, and naval forces to such sensitive and vital areas as Western Europe, the Persian Gulf, South Korea, Alaska, and Panama to support deterrence, provide an initial defense against surprise or short-warning attack, and create foundations for subsequent reinforcements, if they should prove necessary;

—maintenance of the bulk of the U.S. conventional capabilities in the continental United States, along with a capability for rapid deployment to permit a timely response to crises and sudden attacks; and

—subsequent determination of objectives and needs, depending on the evolution of any conflict, and provision of hedge against such needs by means of the National Guard and reserves, the individual ready reserves, a standby draft mechanism, and war reserve stocks for at least sixty days and preferably for six months.

The forces deemed necessary by the Joint Chiefs to execute this strategy were substantial and constituted the objectives that the Reagan administration sought to attain. However, as of the end of fiscal 1988 the forces in place, particularly conventional forces, had fallen far short of these goals (table 19). This shortfall, combined with budget constraints, has raised issues about appropriate force size and composition and future

32. David C. Morrison, "A Pentagon Strategy Draws Flak," *National Journal*, December 31, 1988, pp. 3257–58.

Table 19. Joint Chiefs of Staff Objectives for Minimum-Risk Nuclear and Conventional Force Levels, by Type, Fiscal Year 1991

Type	*Number required*			*Number deployed, end of fiscal 1988*
	Active-duty	*Reserve*	*Total*	
Nuclear				
ICBMs	1,254	. . .	1,254	1,000
Ballistic missile submarines	44	. . .	44	31
Strategic bombers	483	. . .	483	372
Conventional				
Army divisions	25	8	33	28
Marine amphibious forces (divisions and air wings)	3	1	4	4
Air Force tactical fighter wings	38	19	57	37
Aircraft carrier battle groups	22	. . .	22	14
Intercontinental airlift aircraft	632	. . .	632	389
Intratheater airlift aircraft	458	302	760	521

Sources: William W. Kaufmann, *A Reasonable Defense* (Brookings, 1986), p. 101, and *Department of Defense Annual Report, Fiscal Year 1989*, pp. 313–15.

strategy. Concern is especially relevant because, although strategic nuclear forces get much of the attention, 85 percent of the funding goes, as it has gone for nearly thirty years, to the various components of the conventional forces.

It is hardly surprising in these circumstances that all shades of the political spectrum are calling either for actual cuts in the active-duty forces or for a greater substitution of cheaper reserves.[33] The reasons can be readily summarized: the international environment has improved, and current strategy is too conservative and should be replaced by one less demanding. Good sense as well as budget restraints and the demands of other military and nonmilitary needs therefore dictate that active-duty conventional forces be reduced commensurately and significant savings be made.

Radical reductions, however, seem unwarranted. No matter how ambitious the strategy and the Joint Chiefs' force goals associated with it, the United States, though it can maintain overseas deployments in a number of areas, has neither the ready forces nor the intercontinental mobility to reinforce more than two areas (at best) at the same time. Thus a de facto major limitation on the capabilities of the conventional forces already

33. These calls come from a variety of sources. See for example, Scowcroft and Woolsey, "Defense and Arms Control Policy," pt. 3, p. 8; and John F. Lehman, *Command of the Seas* (Scribner 1988), pp. 427–28.

exists. To cut any further, especially when the future is so uncertain, does not seem prudent, even though internationally trends in military strength appear favorable to the United States, and it is in our interest to see them continue.

Until the future becomes a little clearer, perhaps as a consequence of further arms control agreements, the better part of valor would probably be to improve the efficiency with which current capabilities are managed. Improvement means, among other things, rounding out or filling the gaps in existing ground forces and improving Army reserve units, keeping in mind that it would be impossible to train reserves to be equivalent to active-duty units without paying as much as 80 percent of active-duty costs (which is the price the Air Force has to pay for its first-class flying reserve units). Efficiency also means making better use of warning, frequently ambiguous in some respects, to prepare troops for deployment, and even to have troops pack up from time to time and randomly practice deployment.

Above all, modernization of conventional as well as nuclear forces needs to be more carefully managed. The four services still have not finished buying the current generation of weapon systems symbolized by the M-1 tank, the F-16 fighter, and the Nimitz nuclear-powered aircraft carrier. Nevertheless, they are rushing to bring a new generation of systems, such as the advanced tactical fighter and advanced technology aircraft, into service just when the United States should welcome a cease-fire in international weapons competition and when it may turn out that these systems are neither needed nor wanted. In short, as John Tower, President Bush's initial choice for secretary of defense, noted, it is time the missions of the services undergo a major review. In default of central management, excessive resources are going to some missions at the expense of others. The upshot is inadequately balanced capabilities, some of which face the turmoil of continually adapting to new weapons or to the rapid upgrading of older systems. To some of its critics, indeed, the Pentagon has become a procurement agency rather than the overall leader of the armed forces.

The Navy

The Navy is probably the worst offender where large-scale inefficiencies are concerned. It has pushed for 600 battle-force ships, which means a total of 620 or more active and reserve vessels. Its leaders have then produced a so-called maritime strategy to justify the 600-ship goal, even

though the strategy is unrealistic and the forces "required" do not relate to it in any coherent way. Thus the Navy boasts of its ability to provide forward deployments in the Sea of Japan and the Norwegian Sea, to attack enemy fleets in their home ports, and to project naval firepower by means of aircraft, cruise missiles, and guns against targets on land, sea, and air. Indeed, if one were to believe all this, the Navy and the Marine Corps would be the decisive offensive factor in defeating the Soviet Union in a conventional war.

As John Lehman, former secretary of the Navy and architect of the maritime strategy, said, without maritime superiority NATO will lose.[34] But there are several inconsistencies in the Navy's inflated claims and demands. The goal of fifteen carrier battle groups (CVBGs), each costing more than $18 billion, would provide far too few carriers for the missions advocated by the Navy's leadership and too many for more plausible tasks such as attacking enemy overseas bases, providing shows of force against Libya or the like, and supporting Marine Corps assaults in the Persian Gulf or elsewhere outside the reach of land-based aircraft. Adding a brigade's worth of amphibious lift for the Marines—another nineteen expensive ships on top of the fifty-five already in the inventory—would be equally futile. It would do little to expand what the Marines can realistically be expected to do, and would certainly be irrelevant to the objectives of the maritime strategy, which envisions the corps attacking most of the Soviet perimeter, supposedly to prevent Warsaw Pact forces from seizing Western Europe.[35]

Meanwhile, as the Navy seeks to increase its power-projection capability, the vital mission of controlling key sea lanes is not being adequately funded. Several classes of destroyers and guided missile destroyers that would protect convoys are confronting block obsolescence. Only two years ago the number of deployable battle-force ships was expected to reach 605; that number is now estimated to be between 570 and 580.[36] Unfortunately, the Navy's solution to this problem—billion-dollar guided missile destroyers of the Arleigh Burke class (the DDG-51s) with their costly Aegis surveillance, tracking, and battle management systems—is unlikely to improve the situation because so few new ships can be afforded in the years ahead. Similarly, although the Los Angeles (SSN-688) class of

34. Lehman, *Command of the Seas*, p. 147.

35. *Department of Defense Annual Report, Fiscal Year 1987*, p. 183.

36. *Department of Defense Annual Report, Fiscal Year 1988*, p. 336; and *Fiscal Year 1989*, p. 314.

nuclear attack submarine is an excellent (but expensive) instrument for operating quietly in narrow waters and creating barriers to the entry of enemy ships and submarines into major shipping lanes, the Navy intends to replace at least some of them with thirty SSN-21 Seawolf submarines, which are twice as costly ($1.5 billion) and probably not much better for standard antisubmarine warfare.

These ships and submarines, along with two new aircraft carriers and more amphibious lift, are much too rich a diet for these lean times. Furthermore, increasingly expensive and sophisticated vessels mean more personnel and higher operating and support costs. To minimize these expenses yet provide the strength it needs, the Navy could easily settle for 570 active and reserve ships. It could also aim toward a less costly mix of capabilities with a greater emphasis on what is known as sea control and the protection of vital sea lanes in conjunction with the allies, whose substantial fleets the Navy tends to overlook or discount. As matters now stand, trying to cancel the two new carriers (CVN-74 and CVN-75) that Congress has already funded is probably not worthwhile. But if at least five older carriers were retired (including two, the *Midway* and the *Coral Sea*, that would be retired anyway), $2 billion per carrier battle group could be saved in operating and support expenditures in the next three years. Further investment could be saved by forgoing the costs of the service-life extension program for three of the carriers ($800 million for each). Not only would the reduction leave the Navy with twelve deployable carriers and one trainer, a number with which it operated comfortably for many of the years since World War II, but it would also release a number of surface combatants for sea-control duty and lessen the demand for expensive new escorts. On a related issue, the advanced tactical aircraft, of which the Navy plans to buy 522, is now scheduled to move into production in the early 1990s, when it will begin to replace the A-6, a medium bomber. Considering that the Navy is still buying the F/A-18,and that the future of surface combatants in general and carriers in particular is uncertain in light of improving methods of surveillance, the advanced tactical aircraft should undergo rigorous testing and evaluation during the next five years, following the example set by the Air Force with the F-117A (but with fewer aircraft). As another part of the U.S. power-projection capability, the Marine Corps can safely do without the amphibious lift for an additional brigade. And while the V-22 (Osprey) tilt-rotor aircraft ($30 billion to $35 billion for 600 planes) would be nice to have for over-the-beach operations, existing and cheaper helicopters can accomplish the same mission without any significant loss of effectiveness.

It should also be possible both to strengthen U.S. sea-control forces and to save money. Canceling the SSN-21 and continuing production of advanced versions of the SSN-688 would ensure the effectiveness of barrier operations in the western Pacific and north Atlantic. Similarly, deferring the long-range air ASW capability aircraft and further acquisition of the P-3C, along with improvements in the sound ocean surveillance system (SOSUS) and modern mines, would maintain the Navy's ability to conduct antisubmarine operations in the open ocean and over specific areas such as the Denmark Strait and the Norwegian Sea. And to add to the capability for protecting convoys, the DDG-51 could be canceled in favor of less expensive and sophisticated guided missile frigates similar to the FFG-7.

Further savings through less dependence on overseas bases, improved personnel retention, and lower operating costs could be made if the Navy would give up keeping carrier battle groups and battalion-sized Marine amphibious units on permanent station in the western Pacific and the Mediterranean.[37] A more impressive demonstration of naval power would, in any event, result from random sorties to these areas in peacetime (so that U.S. presence or absence would not be taken for granted) and appearances in force during a crisis. Indeed, such a practice would increase the probability that, in the event of a raid such as the one conducted against Libya, the Navy by itself would have the necessary decks and aircraft.

The Air Force

The Air Force has not adopted anything as exotic as the Navy's maritime strategy or as expansive as a 600-ship force—indeed, it has wisely trimmed back to 35 the goal of 44 tactical air wings envisioned at the beginning of the Reagan administration. But in an era marked by a certain lack of coordination among the services, the Air Force does want to maximize the role of its tactical air forces relative to that of the ground forces in any land combat. It also seeks to upgrade its inventory of weapon systems as rapidly as technology and resources will permit. However, precisely because of technological limitations, tactical air forces by themselves cannot prevent an enemy on the ground from advancing and seizing territory. They need enough ground forces, at a minimum, to provide a barrier against such an attack and to force the enemy both to consume

37. Even former Secretary of the Navy John F. Lehman, Jr., conceded that the Navy no longer has to maintain its current operating tempo. David C. Morrison, "The Part-Time Military," *National Journal*, March 4, 1989, p. 520.

resources and to seek their replacement, which in turn creates strategic and tactical targets—the enemy's industrial base and its transportation network.

In the circumstances, the Air Force does not see its main function as helping to strengthen the barrier by directly supporting ground forces. Rather, it considers its principal missions as gaining air superiority over enemy tactical air forces by offensive action and then attacking the enemy's industrial base (if permitted) and crippling its transportation system. To succeed, the tactical air forces must fly deep into enemy territory, which means long-legged aircraft with complex navigation systems. Once there, they must have the munitions, accuracy, and agility to engage in air-to-air combat and to destroy airfield runways and support facilities, aircraft shelters, bridges, tunnels, railroad marshaling yards, even trains and trucks. All of which means that the Air Force must rely on a large number of specialized aircraft or a smaller number of very expensive fighter-attack aircraft. If these missions are successful and timely, the tactical air forces will have played a vital and more or less independent role in defeating the enemy. Indeed, these are precisely the objectives that the Air Force sought to attain in World War II, Korea, and Southeast Asia, with varying degrees of effectiveness. In none of these conflicts, however, can it be said that the Air Force overshadowed the Army.

Despite such results, the Air Force's doctrinal commitment to air superiority and interdiction continues. Even so, its commanders in the field assert that in a future conflict, and especially one in central Europe, if enemy units appeared to be on the verge of smashing through the allied front, the Air Force would use all available assets in direct support of the ground forces. There must remain some doubt, however, about how effective that support would be. Under pressure from then Secretary of Defense James R. Schlesinger, Jr., the Air Force reluctantly agreed to equip seven of its fighter-attack wings (five in the active-duty and two in the reserve forces) with the A-10A, an aircraft specially designed to give close air support to ground forces, but it resisted pressure from Schlesinger's successors to buy more A-10s or develop a successor aircraft.

For better or for worse, the A-10 wings constitute only 20 percent of the thirty-five fighter-attack wings that the Air Force now deploys on active duty and in the reserves. The remaining 80 percent, consisting mostly of older F-4s and the newer F-15s and F-16s along with a small number of stealth fighters (the F-117A), is designed for air superiority and interdiction and is likely to be highly vulnerable to ground fire if used

for close air support. Perhaps such an allocation is inevitable, considering that there is a strong case for a quick victory in a campaign for air superiority. Still, it remains uncertain whether the subsequent interdiction effort would prove so disruptive so rapidly that it could prevent a major enemy breakthrough on the ground.

There are, of course, other missions these aircraft could perform. Perhaps the most interesting is against what has come to be called follow-on forces attacks, in which the enemy is assumed to deploy ground forces to a depth of 100 kilometers or more from the front and to attack weak points in the allied front with waves of these reserves. It is also assumed that the Army, Air Force, and our NATO allies can agree on the targets and timing of attacks and that the Air Force has the navigational aids, sensors, and munitions to disrupt or destroy the enemy follow-on forces.

These are large assumptions, and they may prove to be optimistic if the enemy changes deployments and tactics. But if combined with highly selective interdiction, attacking follow-on forces holds out more promise than an all-out interdiction campaign. Moreover, estimates suggest that U.S. and allied tactical air forces already have more than enough modern fighter-attack aircraft to win air superiority and devote a large number of sorties to a campaign against follow-on forces.[38] In the circumstances the Air Force should probably give its highest priority to improving capabilities for finding targets at night and in bad weather and to developing scatterable munitions that will have a reasonable probability of damaging armored and other tracked vehicles, which constitute the main threat to the front.

Whether the Air Force will see its nonnuclear priorities in this order is another matter. It is certainly the case that acquisition of LANTIRN (low-altitude navigation and targeting infrared system for night) and WAAM (wide-area antiarmor munitions) is proceeding. But the Air Force continues to forgo the development of new aircraft for close air support and concentrates instead on very long-range systems such as the F-15E (at $45 million a copy), the advanced tactical fighter, which will probably cost three times more ($65 billion in fiscal 1988 dollars for 500), and AMRAAM (advanced medium-range air-to-air missile) at about $500,000 a missile in the fiscal 1990 budget, despite continuing problems with identifying enemy aircraft beyond visual range in a complex battle and then obtaining a high probability of kill. Meanwhile, it now asserts that

38. John D. Steinbruner, "The Prospect of Cooperative Security," in Steinbruner, ed., *Restructuring American Foreign Policy*, pp. 114–16.

the F-16 can be adapted to the role of close air support as the A-16. A more prudent policy consistent with fiscal constraints, international trends, and better battlefield performance would have the Air Force proceed to develop a successor to the A-10A, as recommended by Secretary Weinberger, specifically for close air support. It should also increase production rates of the F-16 from 150 to 180 planes a year, but emphasize attacks on follow-on forces rather than close air support. It should cancel the F-15E on grounds of excessive cost and overcommitment to interdiction, and defer production of the advanced tactical fighter and AMRAAM while conducting a rigorous program of testing and evaluation for both. In short, here as elsewhere, concurrency in development and production should be ended.

The Army

Of the three services, the Army plays the most critical role in conventional warfare but gets the smallest budget both in overall terms and in the amount available for investment. For fiscal 1990 the Reagan administration requested only $80.5 billion for the Army, compared with $101.7 billion for the Navy and $100.5 billion for the Air Force. The Army will spend only 29.6 percent of its budget on investment compared with 43.5 percent by the Navy and 52 percent by the Air Force.

One reason the other services have more funding i[illegible] the Army does not contribute significantly to the strategic nuclear forces.[39] Another reason is that it appears to lack the Navy's and Air Force's fast-reaction, fire-fighting qualities so prized by presidents. A quick and exciting strike against Libya is not the Army's strength. Yet it is the Army, with 772,000 active-duty personnel and another 804,000 in the National Guard and the reserves, that must maintain vital ground forces in the forward defense of West Germany (including Berlin) and South Korea, and garrisons in other parts of the world, including Hawaii, Alaska, and Panama.[40] It must also be prepared to reinforce all these areas and have the resources to deploy as many as nine divisions to footholds in the Persian Gulf and the Caribbean. Indeed, none of the commitments to allies could be fulfilled without the presence of significant Army combat and support forces on the ground.

To produce the twenty-eight divisions deemed necessary to meet its most critical responsibilities, the Army must depend more than the other

39 *Department of Defense Annual Report, Fiscal Year 1990*, p. 220.

40 *Department of Defense Annual Report, Fiscal Year 1989*, pp. 305-06.

services on its National Guard and reserve components. From them must come the battalions and brigades necessary to bring five active-duty divisions to full combat strength. In addition, National Guard and reserve components must provide most of the support units essential to sustaining divisions in combat. And they are expected to train, mobilize, and deploy ten of the twenty-eight divisions that the Army has set as its current force goal. It is a heavy burden to place on a reserve capability that works for the most part with hand-me-down equipment and can train no more than forty days a year.

In the circumstances, one would expect the Army to continue the current wave of equipment modernization, extend it to key units in the National Guard and reserve, improve the training throughout the reserves, with more active-duty personnel involved in the process, and ensure that both active-duty and reserve forces can be deployed to trouble spots quickly. And indeed the Army is trying mightily to do just that, but it faces four serious obstacles. Since the Air Force is so penurious in providing close air support to the ground forces and since the Army is denied the right to build fixed-wing, close air support aircraft of its own, it has resorted to using expensive attack helicopters to fill what is perceived as the gap in sorties per division, although helicopters have been highly vulnerable to ground fire in Vietnam, Grenada, the Falklands, and Afghanistan. Even in Grenada, where the defenders had no sophisticated antiaircraft missiles or radar-guided guns, 30 percent of the U.S. helicopters were hit and nine were destroyed.[41]

Moreover, since the Army does not quite believe the Air Force will suppress enemy tactical air forces by quick and decisive offensive action, and since it cannot quite agree with its sister service on who should control what blocks of air space over the Army and its logistical support, it strives to create its own air defense umbrella with both low- and high-altitude surface-to-air missiles (SAMs).

As if AH-64 attack helicopters and Patriot SAMs were not enough of a diversion of resources from the ground forces, the Army has come to suffer from the same desire to accelerate the rollover of its inventory of platforms that has afflicted the other services. It is now striving to acquire what amount to new tanks, new air defenses, new helicopters, new antitank weapons (that can also serve as air defense weapons), and new missiles to go after enemy follow-on forces even though it has not yet completed

41 Lehman, *Command of the Seas*, p. 303.

the current wave of modernization and will not have the resources to do both.

Finally, since the Army does not control the airlift and sealift that would deliver its forces to overseas theaters and has little direct leverage with the Navy and Air Force to provide these services adequately, it has more forces than can be readily deployed and sustained. Even worse, it lacks the incentive to make its equipment easily transportable by air, although General John A. Wickham, Jr., while Army chief of staff, attempted a partial solution to the problem with the creation of light divisions, which now appear to have fallen into disfavor precisely because of their lack of heavy armor and firepower.

Without a bold intervention from the secretary of defense, the Army cannot do much on its own to resolve the close air support and air defense issues. It simply lacks the resources to go beyond what it is already doing to supplement or duplicate the performance of these missions by the Air Force. What it can do, however, is continue modernization with the current generation of weapon systems and resist the temptation to rush into the deployment of the next generation before it is fully tested and evaluated. In other words, even within the constraint of a nominal freeze, the Army will have the resources to buy more advanced M-1 Abrams tanks at $3 million each, M-2 Bradley fighting vehicles at $1 million each (or a lot more upgraded M-113 armored personnel carriers that do not pretend to be tanks), AH-64 Apache attack helicopters ($13 million each), Patriot SAM batteries ($1 million a missile), Stinger and TOW missiles, self-propelled artillery, and trucks. However, if it proceeds in that direction, as it almost certainly should, it will have to defer production on such next-generation systems as LHX (light helicopter, experimental) at $35 billion to $40 billion for some 2,100; FAADS (forward-area air defense system); ATACMS (army tactical missile system); and JSTAR (joint surveillance-target attack radar system). Restraint, which would be dictated primarily by scarce resources and caution about the relative efficiency of the next generation of systems, might also be interpreted as a response to Mikhail Gorbachev's intention to reduce his own ground forces in the next two years. The Army should make a virtue of necessity.

Strategic Mobility

A strategy of forward defense carries with it the implication that the United States and its allies will not trade space for the time in which to mobilize and deploy additional forces. Consequently, intercontinental or

strategic mobility and the timely movement of reinforcements is essential. Although nearly 25 percent of U.S. active-duty personnel are stationed overseas on land or afloat, the bulk of the U.S. conventional capability (active and reserve) remains in the continental United States and would have to be transported to key theaters abroad in the event of a crisis. Indeed, it is often forgotten that if a serious confrontation occurred between the United States and the Soviet Union, all U.S. theater commanders would understandably begin clamoring for their share of available reinforcements, given the inevitable uncertainty as to whether a specific conventional conflict, especially in Europe, could be contained.

In principle, there are five ways to respond to these demands. Instead of stationing some forces overseas and holding most reinforcements in the United States, the Defense Department could change the ratio and place more troops in key theaters such as Western Europe and Northeast Asia. The political and budgetary costs of such a change would far outweigh any potential benefits, however, and it is not considered a serious option. An alternative is to pre-position heavy equipment and supplies in selected theaters and fly in units to marry with them. Although this costs up to $5 billion for a full division's worth of equipment, the United States currently has four full sets in West Germany and plans to increase that number to six. In any event, the cost is not as great as it sounds, since other units, presumably from the reserves, would inherit the equipment left behind by the forces deploying abroad. A variant of land-based prepositioning is to load specialized ships with equipment and supplies and station them in the vicinity of trouble spots. During a crisis the ships would steam to a friendly port or even a beach to await the arrival of troops flown in to take over the materiel. At present the United States deploys twelve such ships in the Indian Ocean and several others in the Atlantic and in Far Eastern waters.[42] Still another way to respond is to maintain a fleet of aircraft with sufficient capacity to move both personnel and equipment to overseas destinations. This option, along with prepositioning, has found the greatest favor in the Defense Department for many years and has been the basis for acquiring a fleet of C-5, C-141, and KC-10A aircraft as well as modifying a number of wide-bodied commercial aircraft in the civil reserve air fleet to carry military cargoes in an emergency.[43] Finally, it is possible by means of fast sealift to move

42 *Department of Defense Annual Report, Fiscal Year 1988*, pp. 228–30; *Fiscal Year 1989*, pp. 219–23; and *Fiscal Year 1990*, p. 173.

43 *Department of Defense Annual Report, Fiscal Year 1989*, p. 315.

large cargoes from U.S. seaports to overseas theaters in a relatively few days. The United States now has eight such ships (SL-7s) and a number of tanker and cargo ships under government control, with a total capacity that will reach 895,000 short tons in the early 1990s.[44]

The current mixture of land and sea pre-positioning, airlift, and sealift should permit the simultaneous delivery of the equivalent of ten divisions to Europe and another three or four to the Persian Gulf during the first thirty days of a U.S. mobilization and deployment. South Korea could also be reinforced by the Marine division in Okinawa or the Army infantry division in Hawaii. Thus in principle the existing system has sufficient capacity to meet the demands of any plausible U.S. strategy. However, there are doubts about its ability to do so in practice. The possibility always exists that an enemy would try to interfere with the process, although the diversity of the system gives some insurance against such an eventuality. Perhaps more important is whether the system is sufficiently well organized and rehearsed to ensure that such a large deployment could take place in so short a time. Most troubling of all is that the United States might not have a grace period as long as thirty days because of enemy attacks after only a brief period of warning, because American decision-makers would fritter away much of the warning time before putting the systems into operation, or because the warning would be too ambiguous to warrant mobilization. To guard against these last dangers, planners in the Defense Department have tended to stress pre-positioning and airlift to the detriment of fast sealift. The Air Force, in particular, claims a mandate to expand its airlift capacity to 66 million ton-miles a day from the current level of about 46 million and proposes to acquire 211 C-17A airlift aircraft at a cost of more than $35 billion in fiscal 1988 dollars to reach its goal.[45] However, such an investment may not be worth its cost when it would add only 4,500 tons delivered to Europe each day, or 135,000 tons a month. In two weeks fast sealift could deliver the same amount of tonnage for about 5 percent of the cost of the C-17A. Thus sealift appears the better buy.

To resupply U.S. forces in a large-scale conflict could take between 7 million and 10 million tons a month. The United States and its allies have

44 *Budget of the United States Government, Fiscal Year 1990*, p. 5-10.

45 *Budget of the United States Government, Fiscal Year 1990*, p. 5-10; *Department of Defense Annual Report, Fiscal Year 1989*, p. 220; *Fiscal Year 1990*, p. 173; and Kaufmann, "Defense Agenda," p. 62.

the shipping capacity to meet these and other demands, but they may not be organized adequately for such a large effort. And while the allies have enough surface combatants to escort their own convoys, it is doubtful that the U.S. Navy (given its heavy emphasis on power projection in recent years) could supply the ninety or more helicopter-equipped escorts needed to protect its shipping (assuming ten escorts for each convoy). Although the Navy might argue that attacking enemy fleets in their home ports would minimize the danger to convoys, such attacks would probably not significantly reduce the threat from submarines. That is why it makes sense to switch surface combatants out of the carrier force and buy more frigates.

Budget Comparisons

Even a modest review of current defense programs shows that savings can be achieved without weakening U.S. military capabilities. In fact, taking resources from some of the more ambitious programs and applying them to less exciting but more essential needs such as escort and mine warfare ships and fast sealift could strengthen those capabilities. But can enough be saved to permit the Defense Department to fulfill its current responsibilities and live within the budget that Congress is likely to impose? Or will the necessary savings result in a hollowing-out of the force?

Much depends on where Congress and the administration come out on defense budget authority and outlays and on specific allocations of budget authority. But suppose what currently appears to be the worst case—that Congress finally settles on a nominal freeze in Defense Department budget authority, which means that, using optimistic department inflation estimates, real budget authority will decline by an average 3 percent a year. Such a decision applied over the next five years would mean that about $230 billion in current dollars would have to be cut out of the Carlucci five-year program (not counting the reductions already assumed but not specified) and, depending on where the cuts were made, that savings in outlays could amount to about $200 billion (table 20).

If the bulk of these cuts were made in the investment accounts and other accounts were adjusted accordingly, a nominal freeze would differ from the Carlucci five-year plan for fiscal 1990–94 by the amounts shown in table 21. The appropriations for military personnel would remain the same. Funds for operation and maintenance and military family housing in the nominal freeze would total $24.2 billion less than those proposed

Table 20. Carlucci Five-Year Defense Plan and a Nominal Freeze, Budget Authority and Outlays, Fiscal Years 1990–94
Billions of current dollars

Item	*1990*	*1991*	*1992*	*1993*	*1994*	*Total*
Authority						
Carlucci plan	305.6	320.9	335.7	350.7	365.6	1,678.5
Nominal freeze	290.2	290.2	290.2	290.2	290.2	1,451.0
Difference	15.4	30.7	45.5	60.5	75.4	227.5
Outlays						
Carlucci plan	293.8	304.7	316.3	329.4	343.5	1,587.7
Nominal freeze	278.6	278.6	278.6	278.6	278.6	1,393.0
Difference	15.2	26.1	37.7	50.8	64.9	194.7

Sources: *Budget of the United States Government, Fiscal Year 1990, Historical Tables*, tables 3-3, 5-1, and author estimates.

by Carlucci. However, the difference could be more than covered either by the receipt of offsets from Japan and West Germany to pay for maintenance and improvement of U.S. military facilities in the two countries and for the U.S. hiring of their civilians or by somewhat deeper cuts in the investment accounts. Military construction would also go down by $9.9 billion in the nominal freeze because of base closings and because new construction would not be needed to accommodate such questionable systems as the B-2, the small ICBM, the rail garrison MX, and the advanced tactical fighter. Nor would construction be needed to provide for the dispersal of the fleet to additional bases (strategic home porting), a proposal that on military grounds never made sense in the first place.

Table 21. Cumulative Costs of Carlucci Five-Year Defense Plan and a Nominal Freeze, by Appropriation Title, Fiscal Years 1990–94
Billions of current dollars

Title	*Carlucci plan*	*Nominal freeze*	*Saving*
Military personnel	421.9	421.9	. . .
Operation and maintenance	492.5	474.0	18.5
Procurement	496.5	340.7	155.8
Research, development, test, and evaluation	211.5	177.3	34.2
Military construction	32.4	22.5	9.9
Family housing	19.7	14.0	5.7
Other[a]	4.3	0.7	3.6
Total	1,678.8	1,451.1	227.7

Sources: *Budget of the United States Government, Fiscal Year 1990, Historical Tables*, table 5.1, and author estimates.

a. Special foreign currency program, revolving and management funds, and trust funds, receipts, and accruals.

More than 80 percent of the net reductions would come from procurement and research, development, testing, and evaluation. These accounts would be reduced by $209 billion, or more than necessary, to make room for procurement and RDT&E not currently in the Carlucci plan (table 22). The strategic nuclear forces program would be reduced by more than $113 billion, largely because of deferred production of the B-2 bomber, cancelation of the rail garrison MX, and reductions in procurement of the D-5 missile and development of the strategic defense initiative. Programs for the conventional forces would lose $95.4 billion with the deferral of such systems as LHX, FAADS, ATF, and AMRAAM and cancelation of others, including the DDG-51, several amphibious ships, and the V-22 aircraft. New programs, which would include development of a smaller ballistic missile submarine and follow-on aircraft for close air support, as well as the acquisition of frigates, fast sealift ships, and heavy airlift aircraft (C5-B), would cost just over $18 billion. As a consequence, the net available reduction of $190.9 billion is slightly higher than the required goal of $189.9 billion. The remaining $1 billion could be allocated to improving the military capability of the reserves.

Force Comparisons

Since the nominal freeze is reached primarily by deferring next-generation weapons for the coming five years and removing some of the duplication and impracticality from the strategic nuclear programs, the size and composition of the forces it supports do not differ greatly from the military posture that the Carlucci defense plan would maintain. The strategic nuclear forces may have slightly fewer launchers and warheads, but they will have at least as much retaliatory power. Under the proposed allocation the Army will continue to field twenty-eight active-duty and reserve divisions, the Marines will retain their four divisions and air wings (three active and one reserve), and the Air Force will operate at least thirty-five active and reserve fighter-attack wings. The Navy will be slightly smaller and its composition somewhat changed, but it will still be able to perform essential power-projection missions and sea-control forces will increase in size and effectiveness.[46] Strategic mobility will benefit from

46. *Department of Defense Annual Report, Fiscal Year 1989*, pp. 314-15, and *Budget of the United States Government, Fiscal Year 1989*, pp. 5-8–5-9.

Table 22. Investment Savings from a Nominal Freeze, by Program, Fiscal Years 1990–94
Billions of current dollars

Programs	*Estimated Carlucci plan*		*Nominal freeze*		*Saving*
	Procurement	*RDT&E*[a]	*Procurement*	*RDT&E*[a]	
Existing programs					
Strategic nuclear forces	116.4	65.5	34.4	33.9	113.6
Tactical nuclear forces	2.4	. . .	2.4	. . .	. . .
Conventional forces					
Tracked vehicles	24.4	8.9	24.4	8.9	. . .
Helicopters	23.0	6.9	23.0	6.9	. . .
Army air defense system	8.9	2.7	0.8	2.7	8.1
Air Force combat aircraft	38.8	29.1	30.6	27.0	11.3
Navy and USMC aircraft	51.8	33.1	37.5	28.6	18.8
Service and support aircraft	20.1	4.0	9.6	4.0	10.5
Major warships and submarines	53.5	10.7	24.1	10.7	29.4
Other ships	12.3	2.5	12.3	2.5	. . .
Ship conversions	5.9	. .	5.9	. . .	. . .
Airlift aircraft	9.3	8.9	2.0	8.9	7.3
Tactical missiles and torpedoes	33.8	6.8	33.8	6.8	. . .
NATO initiatives	2.8	0.6	2.8	0.6	. . .
Intelligence and communications	28.8	19.0	23.8	19.0	5.0
Classified programs	64.2	12.8	59.2	12.8	5.0
Total existing programs	496.4	211.5	326.6	173.3	209.0
New programs					
Development of smaller ballistic missile submarines	. .	. .	. .	2.0	−2.0
NATO barrier (one-third of total cost)	. .	. .	0.9	. .	0.9
Development of new close-air-support attack aircraft	. .	. . .	. . .	2.0	−2.0
16 FFG-X (new guided missile frigates)	. .	. . .	6.4	. . .	−6.4
21 C-5B heavy airlift aircraft	.	. . .	2.0	. . .	2.0
2 maritime pre-positioning ships	.	. . .	0.8	. . .	−0.8
20 fast sealift ships	. .	. . .	4.0	. . .	−4.0
Total new programs	. .	.	14.1	4.0	−18.1
Total	496.4	211.5	340.7	177.3	190.9

Sources: Kaufmann, "Defense Agenda," pp. 90–92, and author estimates.
a. Research, development, test, and evaluation.

Table 23. Procurement under a Nominal Freeze, by Program, Fiscal Years 1990–94

Program	Number	Funding (*billions of current dollars*)
Strategic nuclear forces		
Advanced cruise missile	840	5.1
Trident II submarine	5	8.1
Trident II (D-5) ballistic missile	168	6.1
KC-135 re-engining	250	4.5
Other procurement	. . .	21.4
Tactical nuclear forces		
Tomahawk land-attack missile, nuclear (TLAM-N)	308	2.4
Other procurement	. . .	1.8
Conventional forces		
Tanks	5,000	11.0
Other tracked vehicles	7,000	12.2
Helicopters	1,700	12.9
Combat aircraft	2,000	46.8
Service and support aircraft	866	9.6
Major warships	31	21.3
Other warships and auxiliaries	72	5.9
Airlift aircraft	21	2.0
Sealift and maritime pre-positioning ships	22	4.8
Tactical missiles and torpedoes	180,000	22.0
Other procurement	. .	103.3
Intelligence and communications		
Satellite equivalents	66	22.9
Other procurement	. . .	16.6
Total	.	340.7

Sources: Author estimates based on Kaufmann, "Defense Agenda," pp. 78–79, 90–91.

a somewhat larger heavy airlift capacity and a greatly expanded fast sealift. Moreover, a substantial program of modernization can still be afforded within the constraints of a nominal freeze (table 23). Advanced cruise missiles, five more Trident submarines, a significant number of D-5 missiles, and improved surveillance, early warning, navigational, and communications capabilities could be added to the nuclear forces. The conventional forces could be equipped with 5,000 new M-1 tanks and 7,000 other tracked vehicles, 1,700 more helicopters, an additional 2,000 combat aircraft, 31 more major warships, and 180,000 modern torpedoes and tactical missiles. In short, $340.7 billion over five years can still buy a lot of military capability, even though the total funding available for procurement has been cut by nearly $156 billion from its projected level

(table 22). Moreover, given the tremendous amounts of hardware that the Reagan buildup purchased during the 1980s, the United States will have a first-rate force for the rest of this century.

In the same vein, more than $177 billion for research, development, testing, and evaluation can also accomplish a great deal. Few major weapon systems would be canceled, but equally few of the next-generation capabilities would be moved from research, development, testing, and evaluation into production. What many may see as a case of arrested development would not, however, occur simply because of budgetary constraints or a Luddite opposition to new technology. In light of the difficulties the Defense Department has encountered when bringing new weapons into the inventory, it has become essential to have an active research and development program to hedge against the uncertainties of the future and to ensure that systems really work as intended before they go into production. And considering developments on the international scene, it hardly makes sense to rush into a very expensive modernization program when the prospects for arms control are at least interesting, and efforts to change the military status quo, however well intentioned, could be misunderstood. Should events turn out propitiously, money will have been saved; should the Soviet Union turn sour again, the United States will be in a strong position to upgrade its forces rapidly and protect its interests.

Congress, of course, may prefer to see the next generation of weapons go forward to production and instead achieve the necessary savings by cuts in minor procurement and operation and maintenance. However, because the requisite amounts are so large, it would be difficult to take them out of these accounts without inflicting deep and obvious wounds on the national defense. More balanced forces, a five-year perspective, and a somewhat slower rate at which savings in outlays are made may not be the perfect prescription for the foreseeable future. But it is to be hoped that, as a seventeenth-century bishop commented when he threw a stone at a dog and hit his mother-in-law, even if the intention is imperfectly fulfilled, the effort is not entirely wasted.

Conclusion

Since the United States somewhat reluctantly assumed the burdens of a world power after World War II, it has never spent sufficient funds on defense to carry out simultaneously all its declared commitments and various military strategies. The funds made available to defense in the

past forty-five years have resulted from a combination of factors: the magnitude of the perceived threat, the international environment, and the internal political and economic situation. For better or worse, this nation has now achieved a bipartisan consensus on the approximate level of resources that will be made available to defense in the first part of the 1990s. The challenge for the Bush administration and Congress is to apply those resources in a way that relates them to a coherent strategy and the changing international environment. Nothing will be gained from complaining about the level of resources or allowing the military services to share the resources in accordance with their priorities. In a world of cold war and worst-case scenarios it may not be possible to devise a defense plan that honors both coherence and current fiscal constraints. However, such a plan remains feasible in the world now faced by the United States. Indeed, under a new administration, a strong and enlightened leadership has a real opportunity to put the elements of a reasonable program into place despite the relative scarcity of resources. By contrast, a leadership dedicated to laissez-faire will give the nation the worst of all possible worlds: a widening gap between strategy and resources and a force structure inappropriate to the current international environment.